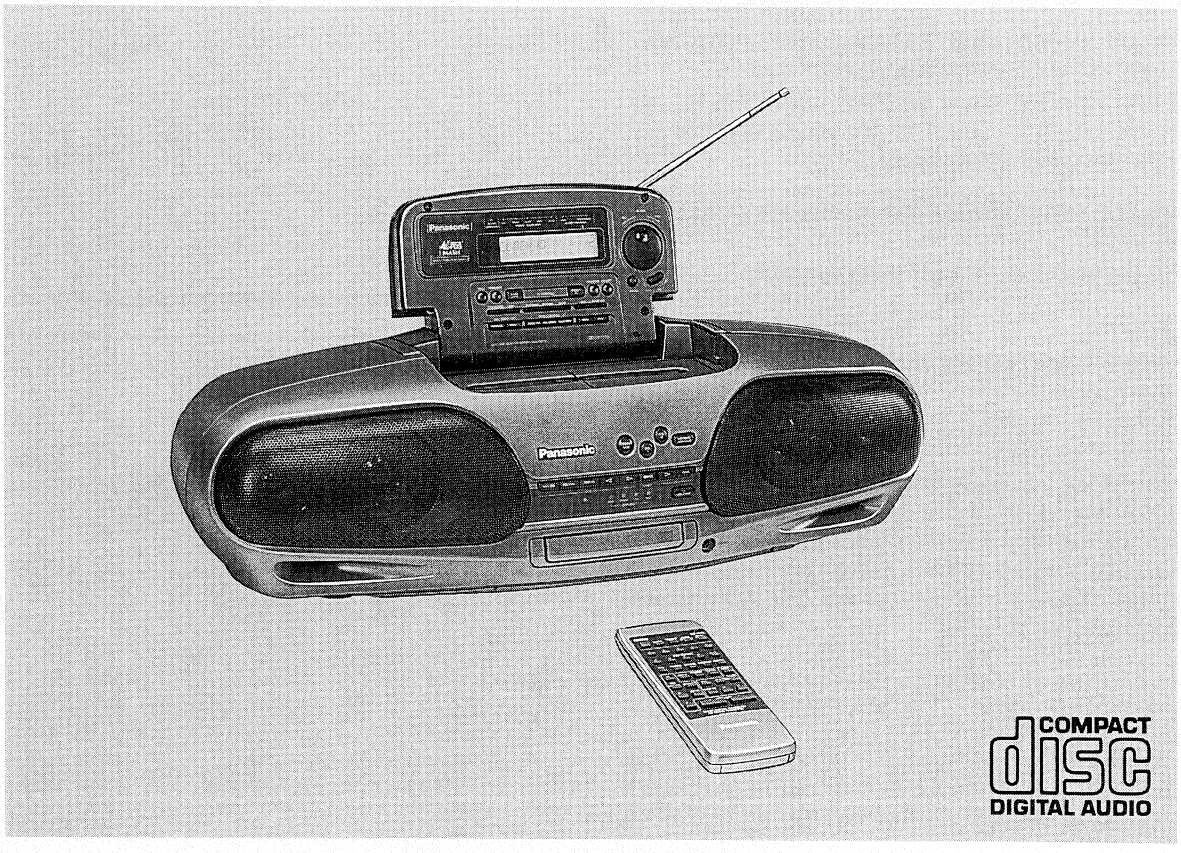
Operating Instructions

Portable Stereo CD System

MODEL NO. RX-DT707



Panasonic

Before operating this unit, please read these instructions completely.

Notes:

- Specifications differ according to the area code.
- The "EB" area code, for example, indicates United Kingdom specifications.
- The "EB" indication is shown on the packing case.

EB EG

Thank you for purchasing this unit. For optimum performance, follow these operating instructions carefully.

Caution for AC mains lead (For United Kingdom)

("EB" area code model only)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.
A 5-ampere fuse is fitted in this plug.
Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.
Check for the ASTA mark ◈ or the BSI mark ♡ on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover the plug must not be used until a replacement cover is obtained.
A replacement fuse cover can be purchased from your local dealer.

CAUTION!
IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.
THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.
If in any doubt please consult a qualified electrician.

IMPORTANT
The wires in this mains lead are coloured in accordance with the following code:

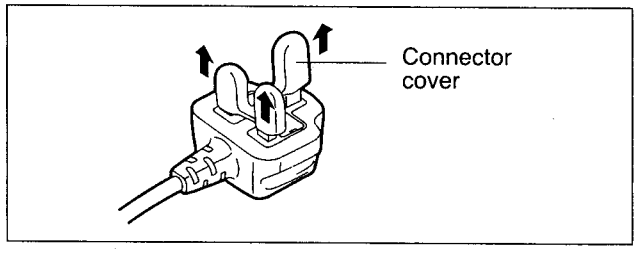
Blue: Neutral
Brown: Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.

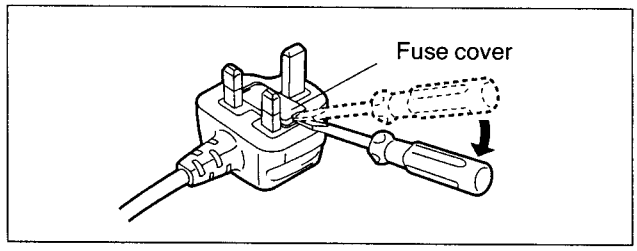
The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

Under no circumstances should either of these wires be connected to the earth terminal of the three pin plug marked with the letter E or the Earth Symbol ⏚.

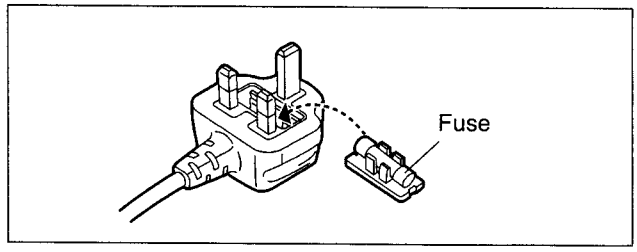
Before use
Remove the connector cover as follows.



How to replace the fuse
1. Remove the fuse cover with a screwdriver.



2. Replace the fuse and attach the fuse cover.



CAUTION!

THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.
DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

DANSK

BEMÆRK!

I DETTE APPARAT ANVENDES EN LASER.
BRUG AF BETJENINGSKNAPPER ELLER REGULERINGER ELLER FREMGANGSMÅDER UDOVER DE I DENNE BETJENINGSVEJLEDNING ANGIVNE, KAN MEDFØRE FARE FOR BESTRÅLING. ÅBN IKKE KABINETTET OG FORSØG IKKE AT UDFØRE REPARATIONER SELV. REPARATIONER MÅ KUN FORETAGES AF KVALIFICEREDE TEKNIKERE.

SUOMI

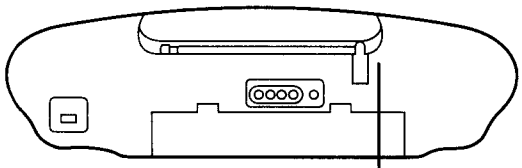
VAROITUS!

LAITTEEN KÄYTTÄMINEN MUULLA KUIN TÄSSÄ KÄYTTÖOHJEESSA MAINITULLA TAVALLA SAATTAA ALTISTAA KÄYTTÄJÄN TURVALLISUUSLUOKAN 1 YLITTÄVÄLLE NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE.

NORSK

ADVARSEL!

DETTE PRODUKTET ANVENDER EN LASER.
BETJENING AV KONTROLLER, JUSTERINGER ELLER ANDRE INNGREP ENN DE SOM ER BESKREVENT I DENNE BRUKSANVISNING, KAN FØRE TIL FARLIG BESTRÅLING.
DEKSLER MÅ IKKE ÅPNES, OG FORSØK ALDRI Å REPARERE APPARATET PÅ EGENHÅND.
ALT SERVICE OG REPARASJONSARBEID MÅ UTFØRES AV KVALIFISERT PERSONELL.



CLASS 1
LASER PRODUCT

LUOKAN 1 LASERLAITE
KLASS 1 LASER APPARAT

(Back of product)
(Tuoteen takaosassa)
(Apparatens baksida)

ADVARSEL: USYNLIG LASERSTRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.

(Indersiden at apparatet)

DANGER-Invisible laser radiation when open.
AVOID DIRECT EXPOSURE TO BEAM.

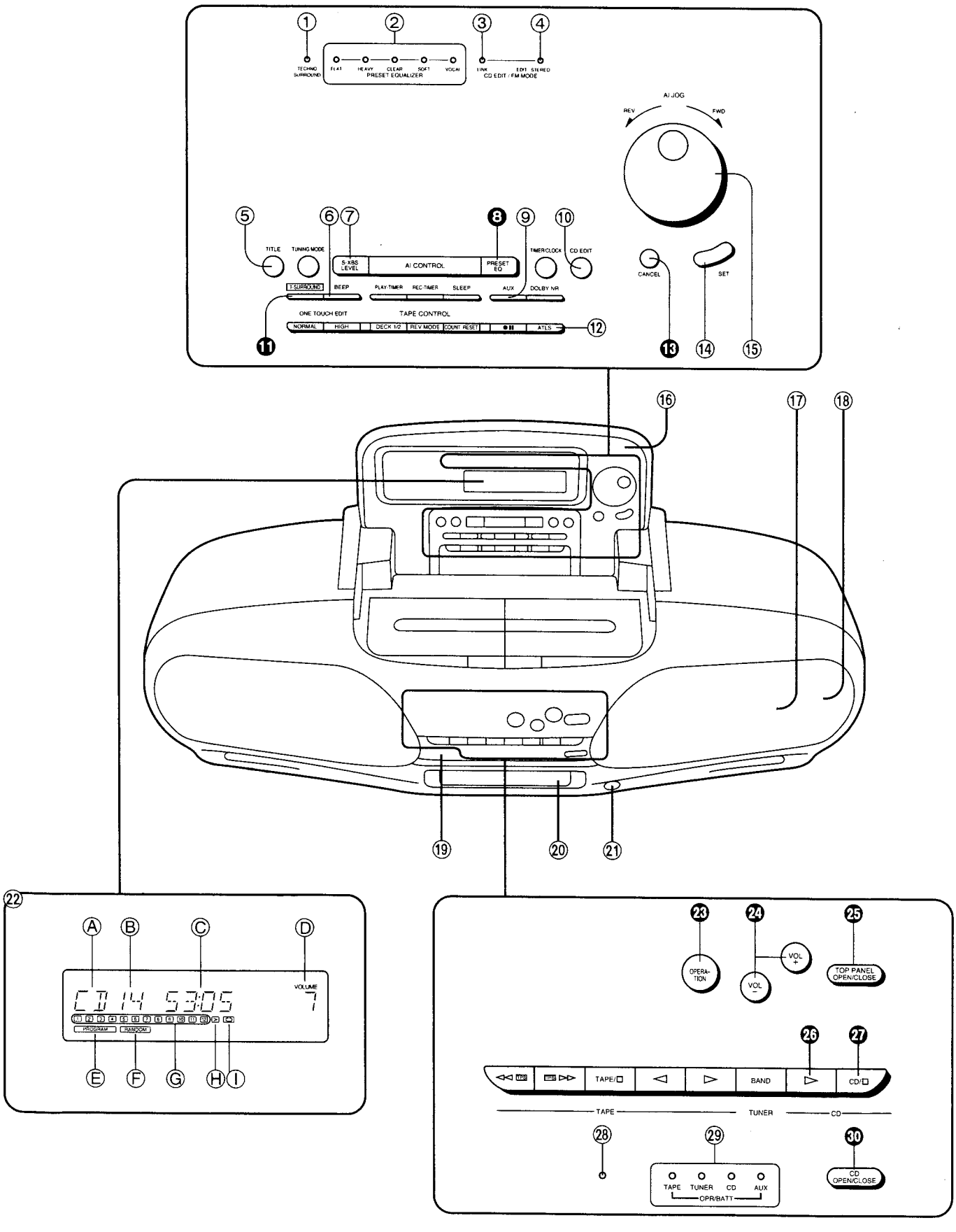
(Inside of product)

VARO! Avattaessa ja suojalkitus ohitettaessa olet alttiina näkymätön lasersäteilylle.
Älä katso säteeseen.

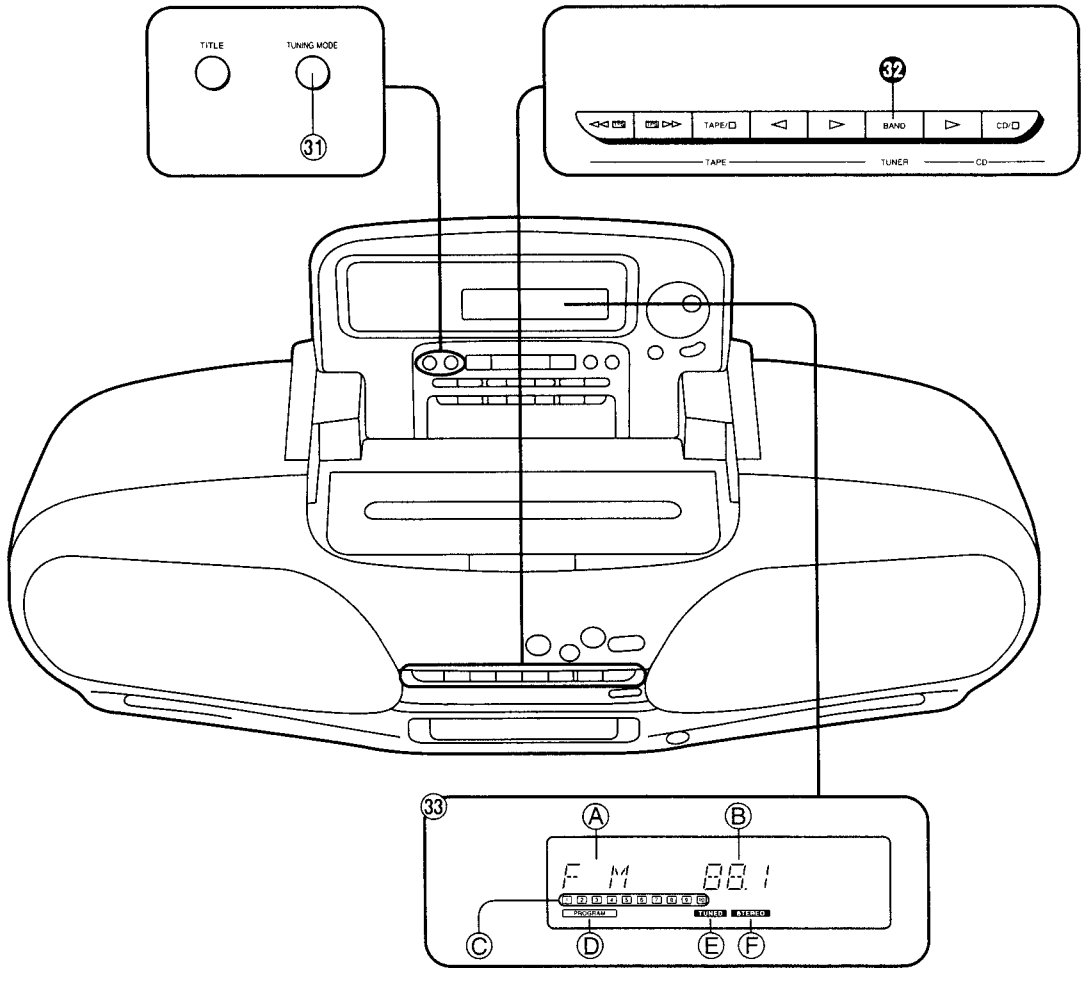
VARNING! Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad.
Betrakta ej strålen.

ADVERSEL! Usynlig laserstråling når deksel åpnes og sikkerhedslås brytes. Unngå eksponering for strålen.

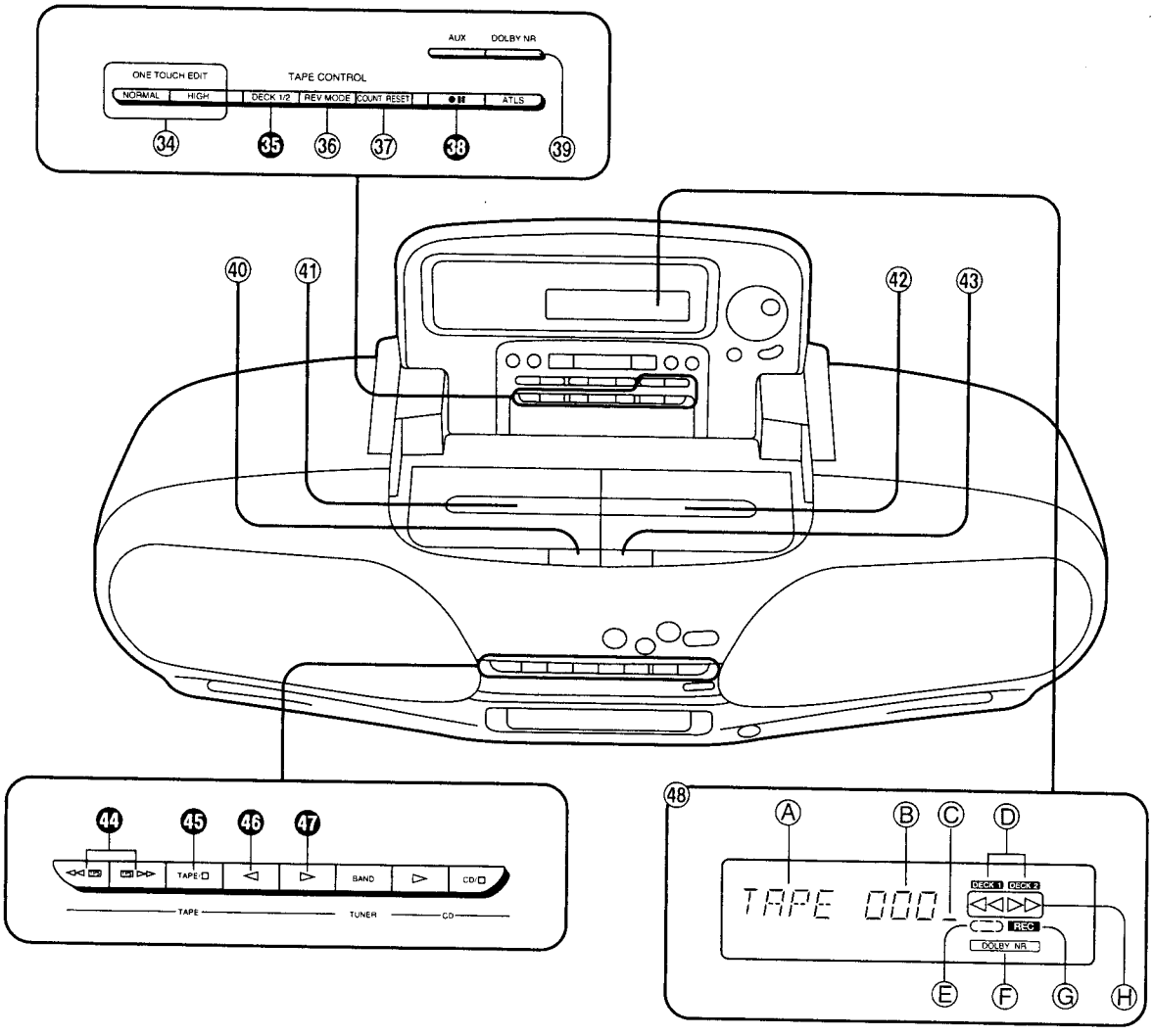
(Tuotteen sisällä)
(Apparatens insida)
(Produktets innside)


TECHNO SURROUND
FLAT
HEAVY
CLEAR
SOFT
VOCAL
PRESET EQUALIZER
LINK
EDIT
STEREO
CD EDIT / FM MODE
AI JOG
REV
FWD
TITLE
TUNING MODE
S-XBS LEVEL
AI CONTROL
PRESET EQ
TIMER/CLOCK
CD EDIT
CANCEL
SET
T.SURROUND
BEEP
PLAY-TIMER
REC-TIMER
SLEEP
AUX
DOLBY NR
ONE TOUCH EDIT
TAPE CONTROL
NORMAL
HIGH
DECK 1/2
REV MODE
COUNT RESET
ATLS
VOLUME
PROGRAM
RANDOM
OPERA-TION
VOL +
VOL -
TOP PANEL OPEN/CLOSE
TAPE/□
BAND
CD/□
TAPE
TUNER
CD
TAPE
TUNER
CD
AUX
OPR/BATT
CD OPEN/CLOSE

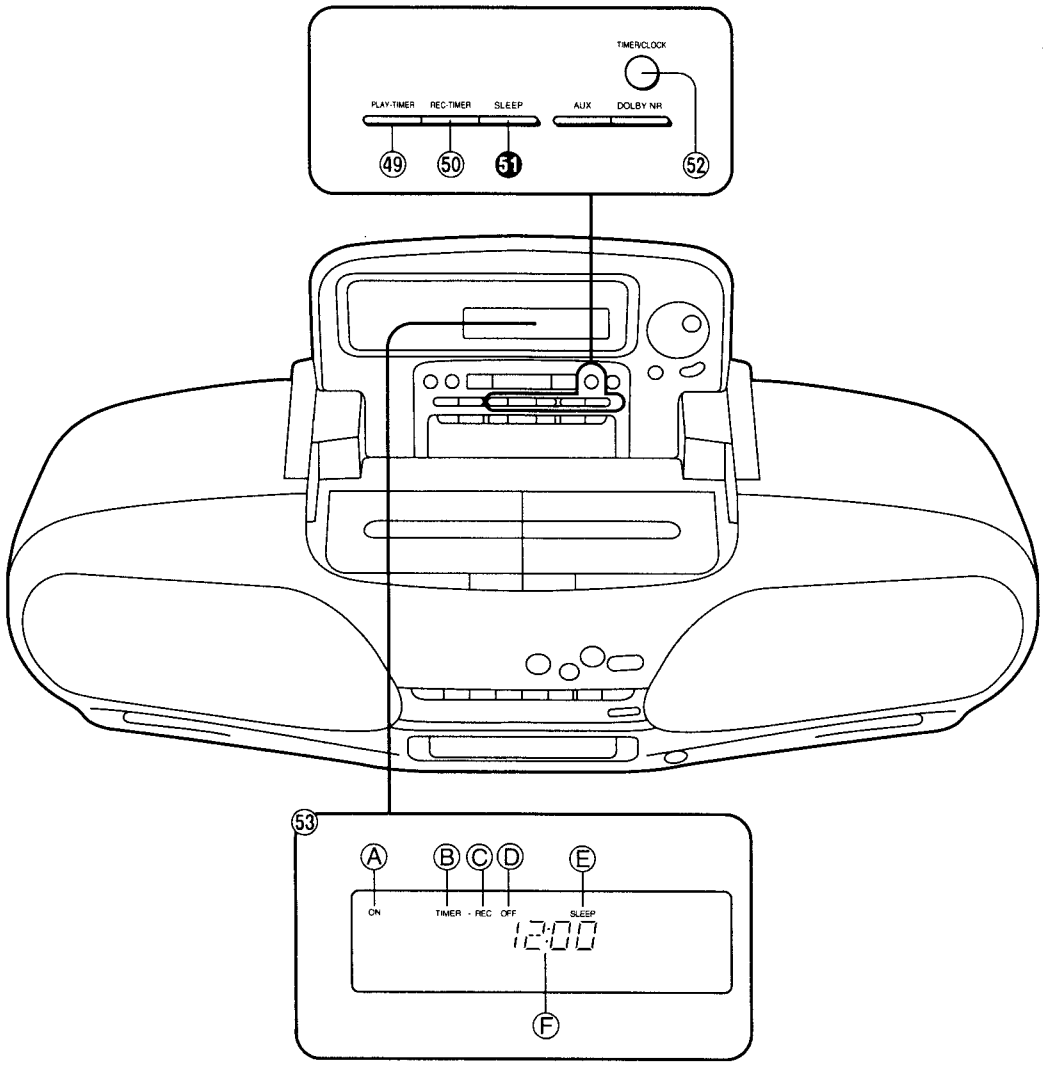
TUNER CONTROLS



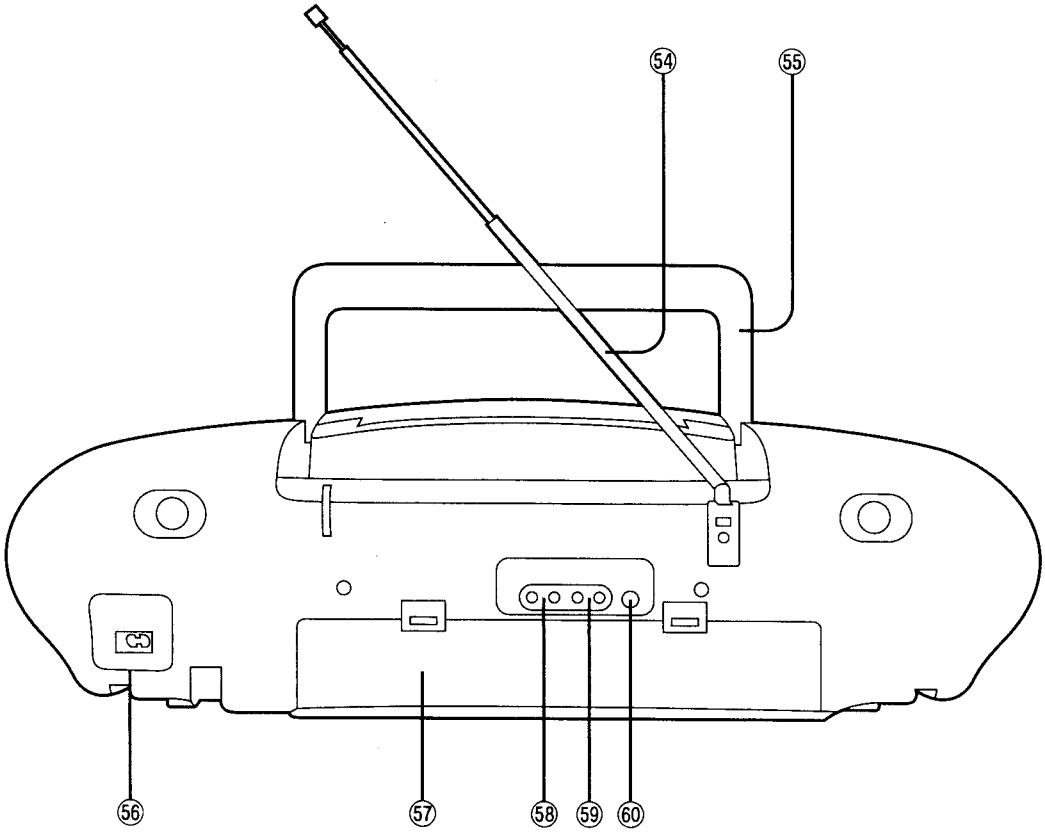
DECK CONTROLS



TIMER CONTROLS



REAR PANEL



CD/GENERAL CONTROLS

The functions indicated by the numbers with black background (for example ❽) can also be activated from the remote control unit. (See page 39.)

① **Surround indicator (TECHNO SURROUND)**

② **Preset equalizer mode indicator (PRESET EQUALIZER)**

③ **Link edit indicator (LINK)**

④ **CD edit/stereo indicator (EDIT/STEREO)**

⑤ **Title button (TITLE)**

⑥ **Beep sound button (BEEP)**
The beep sound (beep) will be emitted each time the operation button is pressed. The beep function can be turned on and off by pressing this button.

⑦ **Super extra bass system button (S-XBS LEVEL)**

❽ **Preset equalizer button (PRESET EQ)**

⑨ **Aux button (AUX)**

⑩ **Compact disc edit button (CD EDIT)**
Press this button to select the desired edit mode.

❶ **Surround function button (T-SURROUND)**

⑫ **Automatic tape level setting button (ATLS)**
Press this button to begin the recording from a CD.

❸ **Cancel button (CANCEL)**

⑭ **SET button (SET)**

⑮ **Jog dial (AI JOG)**

⑯ **Top panel**

⑰ **Speakers [Woofer]**

⑱ **Speakers [Squawker Tweeter]**

⑲ **Remote control sensor**

⑳ **Disc tray**

㉑ **Headphones jack (PHONES)**

㉒ **Display section**
- **A: CD mode indicator**
- **B: Track display**
- **C: Playing time display**
- **D: Volume level display (VOLUME)**
- **E: Program indicator (PROGRAM)**
- **F: Random indicator (RANDOM)**
- **G: Music matrix**
- **H: Over mark indicator (>)**
- **I: Repeat indicator (↻)**

㉓ **Operation switch (OPERATION, OFF/ON)**

㉔ **Volume control (VOL)**

㉕ **Top panel open/close button (TOP PANEL OPEN/CLOSE)**

㉖ **Play button (▷)**
Press this button to start the disc play.

㉗ **CD mode/stop button (CD/□)**
Press this button to listen to the CD or to stop the CD playing.

㉘ **AC connection indicator**
While the AC mains supply is used, it lights as an AC connection indicator.

㉙ **Play mode/operation/battery check indicators**
It functions as a battery check indicator when the unit is operated on batteries.

㉚ **CD open/close button (CD OPEN/CLOSE)**

TUNER CONTROLS

㉛ **Tuning mode button (TUNING MODE)**

㉜ **Tuner/band button (TUNER, BAND)**
Press this button to select the desired radio band.

㉝ **Display section**
- **A: Band indicator (FM/MW/LW)**
- **B: Frequency display**
- **C: Channel number indicators**
- **D: Program indicator (PROGRAM)**
- **E: Tuning indicator (TUNED)**
- **F: Stereo indicator (STEREO)**

DECK CONTROLS

㉞ **Edit recording buttons (ONE TOUCH EDIT)**
Press one of these buttons to start the synchronized edit recording.

㉟ **Deck 1/2 selector (DECK 1/2)**
Press this button to select the operation deck (deck 1 or 2).

㊱ **Reverse mode select button (REV MODE)**

㊲ **Counter reset button (COUNT RESET)**
Press this button to reset the tape counter.

㊳ **Rec-pause button (● ❚❚)**

㊴ **Dolby NR button (DOLBY NR)**

㊵ **Deck 1 cassette eject button (▲ EJECT)**

㊶ **Deck 1 cassette compartment cover**

㊷ **Deck 2 cassette compartment cover**

㊸ **Deck 2 cassette eject button (▲ EJECT)**

㊹ **Fast/tape program sensor buttons (◁◁ TPS ▷▷)**
Press one of these buttons to fast forward or rewind the tape during stop condition, or to skip to the beginning of the next or present tune during playback.

㊺ **Tape mode/stop button (TAPE/□)**
Press this button to listen to tapes or to stop the tape.

㊻ **Reverse-side playback button (◁)**
Press this button to begin the playback (or recording) from the reverse side of the tape.

㊼ **Forward-side playback button (▷)**
Press this button to begin the playback (or recording) from the forward side of the tape.

㊽ **Display section**
A: Tape mode indicator (TAPE)
B: Tape counter
C: Running indicator
D: Deck 1/2 indicators (DECK 1 DECK 2)
E: Reverse mode indicator (⇄)
F: Dolby NR indicator (DOLBY NR)
G: Recording indicator (REC)
H: Tape direction indicators (◁◁ ▷▷)

TIMER CONTROLS

㊾ **Timer play button (PLAY-TIMER)**
Press this button for timer play.

㊿ **Timer recording button (REC-TIMER)**
Press this button for timer recording.

(51) **Sleep button (SLEEP)**
Press this button when you wish to fall asleep while listening to music.

(52) **Timer clock button (TIMER/CLOCK)**

(53) **Display section**
A: Timer ON indicator (ON)
B: Timer play indicator (TIMER)
C: Timer recording indicator (TIMER-REC)
D: Timer OFF indicator (OFF)
E: Sleep timer indicator (SLEEP)
F: Time display

REAR PANEL SECTION

(54) **Telescopic antenna**

(55) **Handle**

(56) **AC socket (AC IN~)**

(57) **Battery compartment cover**

(58) **Aux input jacks (AUX IN)**

(59) **CD output jacks (CD OUT)**

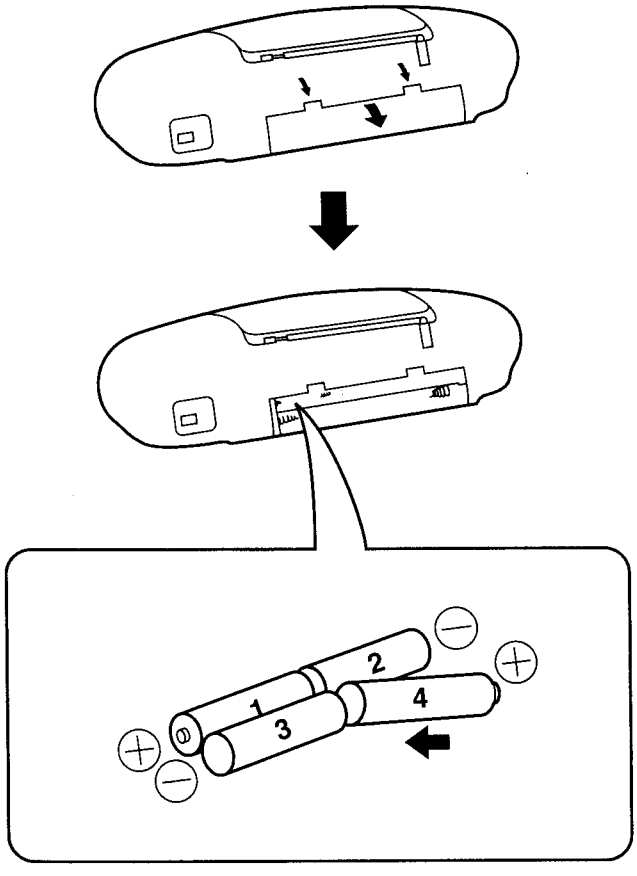
(60) **Mixing microphone jack (MIX MIC)**

INSTALLING THE DRY BATTERIES FOR MEMORY BACK-UP

Installing R6/LR6 dry batteries (Panasonic UM-3, or equivalent, not included) enables the programmed contents of the clock operations, broadcasting stations and CD play sequences to be retained.

■ Memory back-up batteries (4 R6/LR6)

1. Open the battery compartment cover.
2. Insert 4 R6/LR6 (Panasonic UM-3 or equivalent, not included) batteries into the battery compartment, making sure that the batteries are installed in the designated numerical order and that the proper polarities are maintained.



Program memory for the tuner, CD, and clock/timer of this unit is retained by AC mains when operated on AC mains supply or by battery power when operated on batteries. In case the memory back-up batteries are not used, power failure (when using AC mains) or the following operations cause the erasure of the memory:

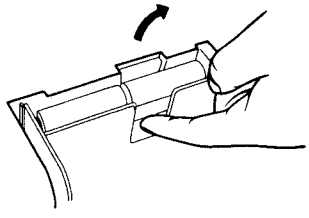
- When using AC mains; unplugging the AC mains cord from the household AC mains outlet.
- When using battery power (R20/LR20); inserting the AC mains cord only into the AC socket of this unit.

If one of the above cases occur, enter the program in memory again.

In order to avoid the accidental erasure of the program in memory, using the memory back-up batteries is recommended.

- The life of the memory back-up batteries is about one year.
- The life of the memory back-up batteries can be prolonged by keeping the mains lead plugged in the household mains outlet at all times.
- When disconnecting the mains lead, switch off the unit first using the operation switch.
  The life of the memory back-up batteries is reduced if the mains lead is disconnected from a household mains outlet with the mains still supplied.
- While exchanging the memory back-up batteries, be sure to connect the AC mains cord both to the unit and household AC mains outlet.

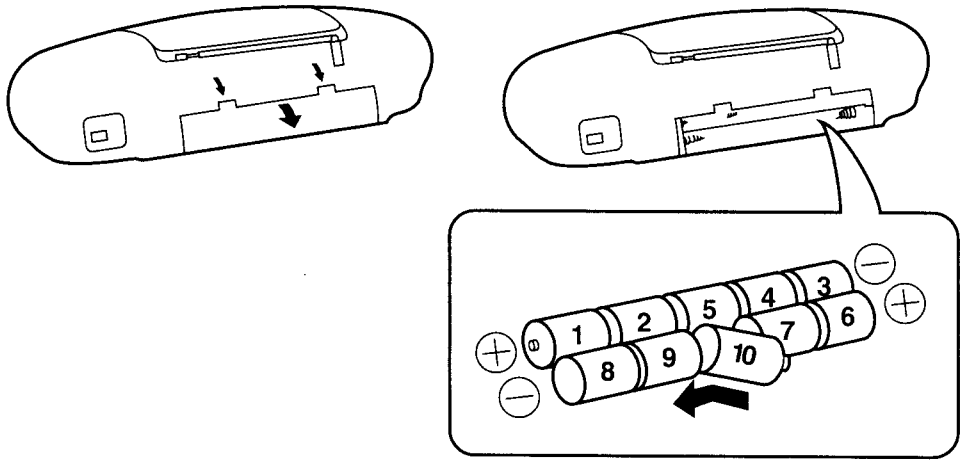
•Battery removal



POWER SOURCE

■ Battery operation (10 R20/LR20)

Insert 10 R20/LR20 (Panasonic UM-1 or equivalent, not included) batteries into the battery compartment, making sure that the batteries are installed in the designated numerical order and that the proper polarities are maintained.

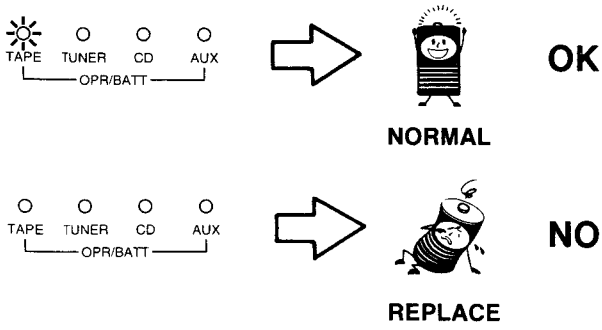


•Battery life

The amount of light provided by the play mode/operation/ battery check indicator is a good indication as to how much longer the batteries can be used.

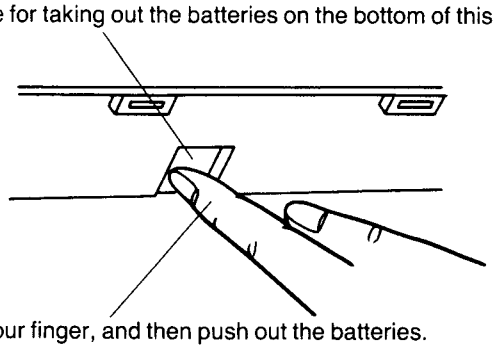
•Press the operation switch to turn on the unit.

When the play mode/operation/battery check indicator goes out or dims, replace all batteries with new ones.



•Battery removal

The hole for taking out the batteries on the bottom of this unit

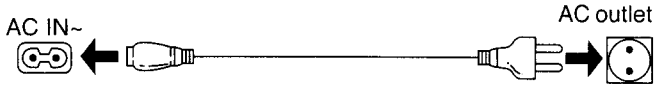


Insert your finger, and then push out the batteries.

■ AC power operation

Connect the included AC mains cord to the AC socket in the unit and your household AC mains outlet.

FOR UNITED KINGDOM ONLY
BE SURE TO READ THE CAUTION FOR AC MAINS LEAD ON PAGE 2 BEFORE CONNECTING THE AC MAINS CORD.



Notes:

- To operate on battery power, unplug the AC mains cord from the household AC mains outlet and the AC socket on the unit.
- The configurations of AC mains cord and outlet differ according to area.

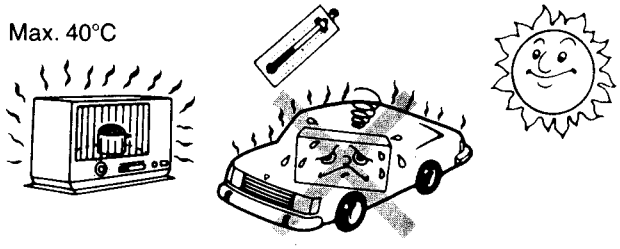
PRECAUTIONS

- **If the set is not used for a long period of time or is used only from an AC mains source, remove all the batteries to prevent potential damage due to possible battery leakage.**
- Avoid using or placing this unit near sources of heat. Do not leave it in an automobile exposed to direct sunlight for a long time with the doors and windows closed as this may deform the cabinet.
- Avoid cuts, scratches, or poor connections in the AC mains cord, as they may result in possible fire or electric shock hazard. Also, excessive bending, pulling or splicing of the cord should be avoided.
- Do not unplug the AC mains cord by pulling on the cord. To do so may cause premature failure or shock hazard.
- Do not operate the set on AC mains in a bathroom, as a potential shock hazard may result.

To prevent possible damage to this unit

- Load new batteries with their polarities (⊕ and ⊖) aligned correctly.
- Do not apply heat to batteries, or internal short-circuit may occur.
- If this unit is not to be used for a long period of time, or used on AC mains supply, remove all batteries and store them in a cool and dry place.
- Remove spent batteries immediately.
- Do not use old and new batteries together. Also never use an alkaline battery with a manganese battery.

- When not in use, disconnect the AC mains cord from the AC mains outlet.
- **The Operation Switch does not separate entire unit from mains even if in "OFF" position.**



WARNING:
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

BASIC OPERATING PROCEDURE

■ Beep sound function

The beep sound (beep) will be heard each time the operation button is pressed. This is convenience for confirmation of the operations by remote control unit. Also, error beeps (beep beep) will be heard when the wrong buttons are pressed.
(For example, for CD play, when a nonexistent track is specified.)
The beep function can be turned on and off by pressing the beep sound button.

■ Direct access play function

(AC power operation only)

If, already the CD and/or cassette tape is loaded, the CD play or tape playback can be started by simply pressing the CD play button or tape playback button even if the unit is turned off.
Also radio reception can be turned on by pressing the tuner band button.
(This unit is turned on and the appropriate sound source is selected automatically.)

■ After use

Be sure to reduce the volume level, and turn off by pressing the operation switch.

■ To open or close the panel cover

•To open the top panel

1. Connect the AC mains cord to the AC socket.
2. Press the operation switch.
3. Press the top panel open/close button.

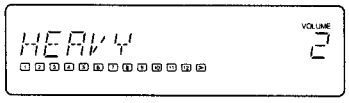
•To close the top panel

Press the top panel open/close button.
Do not attempt to close the top panel with either of the cassette compartment covers open. It will not be possible to close the top panel because it will come into contact with the cassette compartment cover.
You can open or close the top panel using the top panel open/close button when the unit is in the standby or timer standby condition.

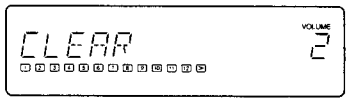
■ To retrieve a desired tone quality

Five types of equalization curves (tone quality) are preset to this unit. Select a desired tone quality according to the source.

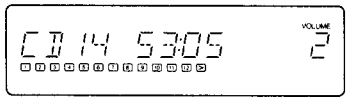
1. Press the preset equalizer button.
   The display will return to what was previously indicated if 5 or more seconds are allowed to elapse before the next operation is selected.



2. Turn the jog dial to select a desired tone quality.
   5 types of acoustic environments will be alternately displayed.



3. Press the SET button.
   The preset equalizer mode indicator will illuminate, and then the display will return to the previous condition.



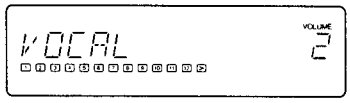
•The preset equalization curves

1. HEAVY
   This curve can add extra bass tone to rock and other music.

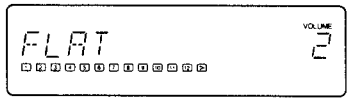
2. CLEAR
   This curve purifies the treble range of jazz, etc.

3. SOFT
   This curve is for easy listening music, etc. at a low volume level.

4. VOCAL
   This curve purifies vocal music.



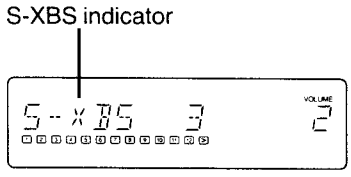
5. FLAT
   This curve is for normal stereo listening.



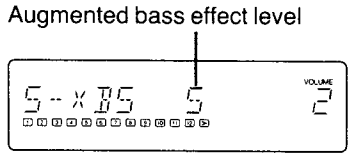
■ S-XBS system (Super extra bass system)

You can adjust the S-XBS level as desired.

1. Press the super extra bass system button.
   The display will return to what was previously indicated if 5 or more seconds are allowed to elapse before the next operation is selected.



2. Adjust the S-XBS effect using the jog dial.
   You can adjust the S-XBS effect from 0~10 in 10 steps.
   FWD: To increase the S-XBS effect
   REV: To decrease the S-XBS effect



3. Press the SET button.
   The display will return to the previous state.

Notes:

- S-XBS level you adjusted in FLAT mode can be stored in the unit's memory. To retrieve the previous S-XBS level, adjust the S-XBS level to 5 using the jog dial.
- S-XBS level you adjusted in any mode except for FLAT mode can be temporarily memorized until you change the mode or re-adjust the level.

■ To create the "live" performance sound

You can create the "live" performance sound with the surround function button. It is especially effective when listening to live broadcasts or recordings.

Press the surround function button.
The surround indicator on the top panel will illuminate.

According to the type of a tune, the strength of surround sound effect will differ.

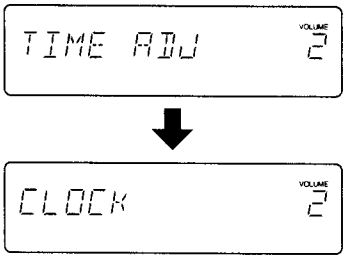
•To cancel the surround sound function
Press the surround function button.
The surround indicator will go out.

TIME ADJUSTING

Before operation, press the operation switch to turn on the unit.

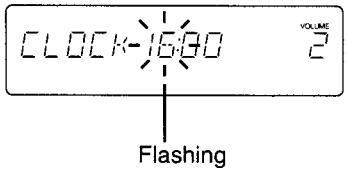
For example:
To set the time at 16:20.

1. Press the timer clock button, and then turn the jog dial to select the "CLOCK" mode.
   The display will change to "P-TIMER"–"R-TIMER"–"SLEEP"–"CLOCK".



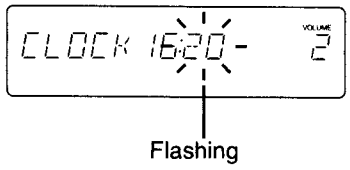
   Press the SET button.

2. Turn the jog dial to adjust the correct hour display.
   FWD: Increase.
   REV: Decrease.



   Press the SET button.

3. Turn the jog dial to adjust the correct minute display.
   Note that the minute "00" display appears following "59", but the hour display is not changed.



4. Press the SET button to finish setting the time.
   The display will change to the previous display.

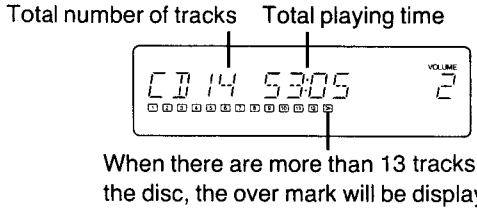
   When the SET button is pressed, the clock is reset to "0" second.
   When a wrong operation occurs while operations of steps 1~3, press the cancel button, then the unit is returned to the previous mode.

■ Sequential play

1. Press the CD mode/stop button after pressing the operation switch.
   The unit is turned on, and CD mode indicator will appear on the display.

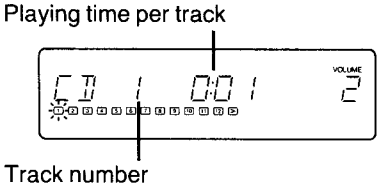
When no disc has been loaded, display shows "NO DISC", and then "PANASONIC".

2. Press the CD open/close button and then insert a disc.
   Press the CD open/close button to close the disc tray.
   When the disc tray is closed, the disc rotates, and the total number of tracks and total playing time both appear on the display.


Total number of tracks
Total playing time
CD 14 53:05
VOLUME
2
When there are more than 13 tracks on the disc, the over mark will be displayed.

If you press the play button instead of the CD open/close button, after inserting a disc, the tray will close and play will start directly from the track 1. But the total number of tracks and total playing time will not be displayed.

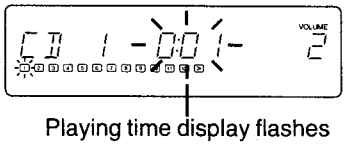
3. Press the play button.
   Disc play begins from the first track. The number of the track being played will illuminate on the display.



4. Adjust the desired volume.

•To briefly interrupt play

Press the pause button on the remote control unit during disc play.
(The playing time display will start to flash.)
When the pause button is pressed again, disc play will resume from where it was previously stopped.



•To stop disc play

Press the CD mode/stop button.
(The disc will automatically stop when all the tracks have been played through.)

Notes:

- •Playing a compact disc near a tuner or TV, it may cause noise in the broadcast, or disturbance of the TV picture. When it occurs, separate the unit from the TV or tuner set as far as possible.
- •Do not place any object in front of this unit. It may hinder from opening and closing the disc tray.
- •If you press the operation switch while the disc tray is open, the tray automatically closes, and the unit turns off (auto close function).
- •The total playing time displayed includes the silent sections between tracks. For this reason, it may differ by a few seconds from the playing time printed in the disc's liner notes.

Compact disc title memory function

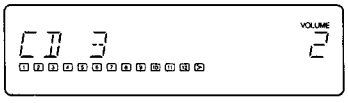
Instead of the total playing time and total number of tracks, you can display the title of a compact discs. (See page 36.)

■ Program play

Up to 36 tracks can be programmed.

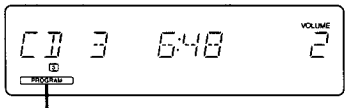
•From the main unit

1. Turn the jog dial to select the desired track to be played.
   The display will return to what was previously indicated if 8 seconds are allowed to elapse before the next operation is selected. In that case, repeat this step.



2. Press the SET button.
   The program indicator will appear on the display.

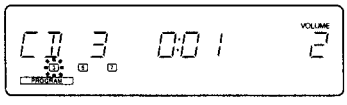
   The programmed order will be indicated for about 2 seconds and then the whole play time will be displayed.
   Repeat the above steps to memorize a track in sequence.
   To select the same track as you programmed last, turn the jog dial a little.



Program indicator

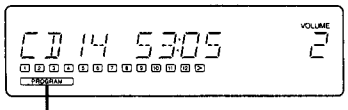
   When you programmed any track(s) more than 12th, the music matrix shows "[>]". However, you can program more tracks up to 36.

3. Press the play button.
   The program play will begin from the first track you entered.



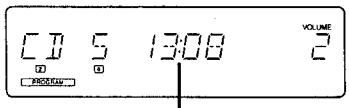
•From the remote control unit

1. Press the program button.
   The program indicator appears on the display.



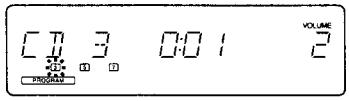
Program indicator

2. Press the numeric buttons that correspond to the numbers of the tracks to be played in sequence.
   When the numeric buttons corresponding to each track number are pressed, the programmed order will be indicated for about 2 seconds and then the whole play time will be displayed.
   Repeat the above steps to memorize a track in sequence.



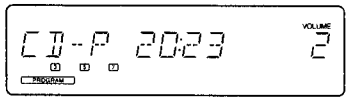
Total playing time for specified tracks

3. Press the play button.
   Play now starts in the programmed sequence.



•To stop the program play

Press the CD mode/stop button.
(Play will stop automatically when all the programmed tracks have been played through.)



The programmed tracks will be retained until the program play mode is cancelled by opening the disc tray or pressing the cancel button.

•Checking what has been programmed

The tracks which have been programmed and the play sequence can be checked when the skip/search button of the remote control unit is pressed in the stop mode.

•To program track no. 11 or grater on the remote control unit

First press the "+10" button and then one of the "1" to "10/0" buttons.
Track no. 15: +10→5
Track no. 20: +10→+10→10/0
Track no. 36: +10→+10→+10→6
Track no. 40: +10→+10→+10→+10→10/0

Notes:

- "ERROR" appears on the display when a nonexistent track is specified.
- "FULL" appears on the display when tracks more than 36 have been programmed, to indicate that tracks more than 36 cannot be programmed.
- "– –:– –" appears on the time display when the total play time of the programmed tracks exceeds 120 min 0 sec, and the total time is not displayed.

■ Clearing a program

•Clearing all the programmed tracks (Cancelling the program play mode)

1. Press the program button of the remote control unit in the stop mode.
   (The program indicator will start to flash on the display for several seconds.)
2. Press the cancel button while the indicator is flashing.
   (The program indicator goes out and the programming is cleared.)

•Clearing only the track programmed last

Press the cancel button in the stop mode.
(Each time the button is pressed, the track programmed last can be cleared in sequence.)
Example: When tracks 3, 5 and 7 have been programmed, the tracks will be cleared in the sequence of 7, 5 and 3 each time the cancel button is pressed.

> **Note:**
> It is not possible to clear only a track located in the middle of the program (such as the third of 5 tracks).

Program memory function

The programmed tracks will be retained until the program play mode is cancelled by opening the disc tray or pressing the cancel button.

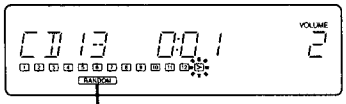
■ Random play (on the remote control unit only)

The microcomputer inside the unit selects the tracks each time regardless of their sequence on the disc.

Press the random button in the stop mode.

The random indicator on the display appears, and play now starts.

The sequence in which the tracks are played changes each time.



Random indicator

•When all the tracks have been played through

Play mode stops automatically.

•To cancel the random play

Press the random button again.
The random indicator goes out. It is possible to clear random play by pressing the stop button.

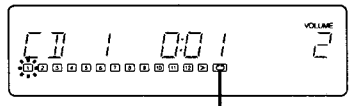
> **Note:**
> The random play function cannot be used in combination with the program play function to play tracks.

■ Repeat play (on the remote control unit only)

This function repeats playing all of the tracks.
In the programmed play mode, the tracks are played in the programmed sequence.
In the random play mode, the tracks are selected each time and all the tracks are played.

Press the repeat button and then press the play button.

The repeat indicator appears on the display.



Repeat indicator

•Playing one track through

First select the track with the program play function and press the repeat button and then press the play button.

•Clearing the repeat play function

Press the repeat button again.
(The repeat indicator goes out.)

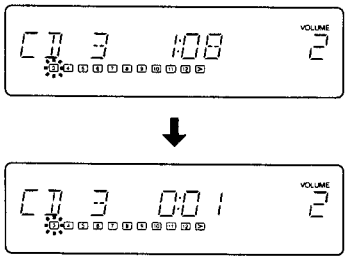
■ Skip play (on the remote control unit only)

Press one of the skip/search buttons momentarily until the desired track has been located during disc play.

•When you wish to listen from the beginning of the track being played...

Press the |◀◀/◀◀ button once.

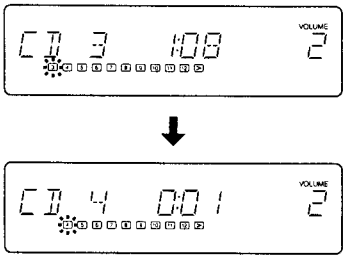
For example, if you press the |◀◀/◀◀ button while the track 3 is being played, the disc will be played from the beginning of the track 3.



•When you wish to skip the track being played and listen to the next track...

Press the ▶▶/▶▶| button once.

For example, if you press the ▶▶/▶▶| button while the track 3 is being played, the disc will be played from the beginning of the track 4.



•When you wish to skip several tracks...

Repeatedly press one of the skip/search buttons. (Check the track number on the display.)

During program play

The tracks are skipped in the programmed sequence.

During random play

It is not possible to skip to the previous track with the |◀◀/◀◀ button.

■ Search play (on the remote control unit only)

While watching the track and time displays, press and hold one of the skip/search buttons during disc play.

Release the button when the desired point has been reached.

▶▶/▶▶|: Pickup moves forward.

|◀◀/◀◀: Pickup moves backward.

The pickup moves slowly at first and then rapidly if the button is held down for more than about three seconds.

Notes:

- During program play and random play, you can only search the track being played.
- If you release the button immediately, the unit will go into the skip play.

■ Direct access play

A disc can be played from a specific track to the end of the last track.

•From the main unit

1. Turn the jog dial to select the desired track.
2. Press the play button.

•From the remote control unit

Press the numeric button (1–10/0, +10) to specify the track number.

The selected track will begin to play.

To select track no. 11 or greater

First press the "+10" button and then one of the "1" to "10/0" buttons.

Track no. 15: +10→5

Track no. 20: +10→+10→10/0

Track no. 36: +10→+10→+10→6

Track no. 40: +10→+10→+10→+10→10/0

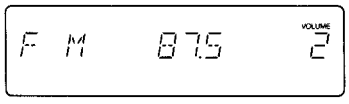
"ERROR" appears on the display when a nonexistent track is specified.

Note:

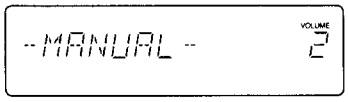
This is not possible in the program play mode. (Tracks are added onto the programmed tracks.) Release the program play mode first and then proceed to operate.

■ Tuning

1. Press the tuner/band button after pressing the operation switch.
   The unit is turned on, and the tuning display mode will appear.
2. Press the tuner/band button again to select the desired radio band (FM, LW, MW).
   The corresponding band indicator will appear.

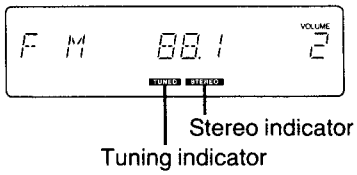


3. Press the tuning mode button to select "MANUAL".
   Every time this button is pressed, the "MANUAL" and "PRESET" modes are selected alternately.



4. Turn the jog dial to tune in your favorite station.
   Turn the jog dial till the correct frequency and the tuning indicator appears.
   If the FM stereo broadcasts is received, the stereo indicator will appear.

   When tuning the station, the frequency display will changes as follows:
   FM: 50 kHz step
   LW: 9 kHz step
   MW: 9 kHz step



   If FM stereo reception is poor (excessive noise, stereo indicator flickers), press the FM mode/beat proof button on the remote control unit to change to the monaural position (CD edit/stereo indicator and the stereo indicator go out). This will reduce the noise and provide clear reception; however, the broadcast will not be heard in stereo.

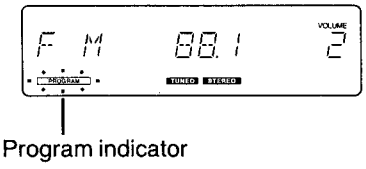
5. Adjust the desired volume.

■ Memory presetting

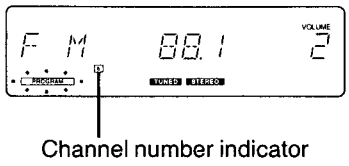
You can memorize up to 30 radio stations (10 in FM; 10 in LW; 10 in MW), into the units preset memory.

•From the main unit

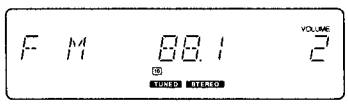
1. Tune to the desired broadcast using the jog dial.
2. Press the SET button to make the program indicator flash.
   The program indicator will flash for about 10 seconds. If the program indicator turns off, repeat this step, otherwise, the broadcast frequency will not be stored in the next step



3. Turn the jog dial to select the desired channel number while the program indicator is flashing.
   FWD: The channel number will move forward from 1 to 10.
   REV: The channel number will move backward from 10 to 1.



4. Press the SET button.
   The program indicator will turn off.



   Repeat the above steps to memorize a station in each of the remained preset channels.
   When a new frequency is memorized in a channel, the frequency previously memorized in that channel will be cancelled.

Station memory function

Instead of the frequency display, you can display the name of the broadcast stations. (See page 36.)

■ Memory presetting

•From the remote control unit

1. Tune to the desired broadcast using the jog dial on the main unit.
2. Press the program button to make the program indicator flash.
   The program indicator will flash for about 10 seconds. If the program indicator turns off, repeat this step, otherwise, the broadcast frequency will not be stored in the next step.

Program indicator

3. Press one of the numeric buttons (1–10/0) while the program indicator is flashing.
   The program indicator will turn off and the selected channel number indicator will appear in the display.

4. Repeat the steps 1–3 to memorize a station in each of the remained preset channels.
   When a new frequency is memorized in a channel, the frequency previously memorized in that channel will be cancelled.

■ Memory tuner operation

•From the main unit

1. Press the tuner/band button to select the desired radio band.
2. Press the tuning mode button to select the "PRESET" mode.
3. Turn the jog dial to select the desired channel number.

•From the remote control unit

1. Press the tuner/band button to select the desired radio band.
2. Press the numeric button to select the desired channel number.

■ Antennas

FM:

Pull out the telescopic antenna and adjust its length and angle for optimum reception.

LW/MW:

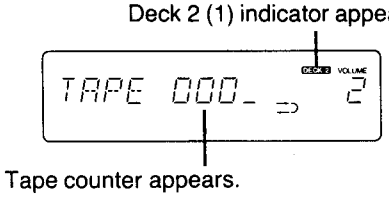
The sensitive ferrite core antenna inside the set will provide excellent LW/MW reception in most areas. For optimum reception, turn the set in the direction which gives the best results since the ferrite core antenna is directional.

■ Most recent memory

The most recent memory system remembers the broadcast station last tuned to when the radio is switched "OFF" or other functions are selected. The last tuned station will be heard when the unit is switched "ON" or the radio function is selected.

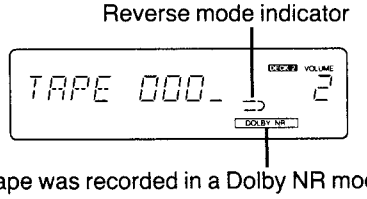
Tapes can be played back in deck 1 or deck 2.
Either normal, CrO_2 or metal type cassettes can be used.

1. Press the tape mode/stop button after pressing the operation switch.
   The unit is turned on, and the tape mode indicator will appear.
2. Press the eject button to insert the cassette tape.
   Insert the tape with the exposed part of the tape facing to you.



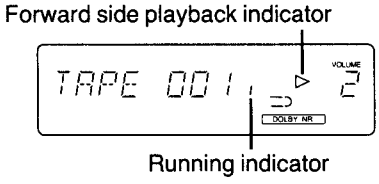
The operation buttons in the deck controls section are common for deck 1 and deck 2. You can operate the deck of which deck indicator appears.
To change the deck to be used, press the deck selector (DECK 1/2).

3. Press the reverse mode select button to select the desired reverse mode.
   The modes are selected in turn each time the button is pressed.
   See page 25 for further details.



If the tape was recorded in a Dolby NR mode, press the Dolby NR button to set the Dolby noise reduction.
The Dolby NR indicator will appear.

4. Press the playback button to begin the playback.
   ▷: For playback from the forward side.
   (side facing outward)
   ◁: For playback from the reverse side.



5. Adjust the desired volume.

•To stop the tape
Press the tape mode/stop button of the deck controls section.

■ Using the tape counter

If you take a note of the tape counter display before recording, it will be easy to find the start of the program.

1. Insert the tape into deck 1 or deck 2.
   When tapes have been inserted into both decks, the counter provides a display for the deck in which the tape was inserted last.
2. Select the deck to be used using the deck selector.
3. Press the counter reset button.
   While the reverse side of the tape is being played back (◁), the counter will count back (000–999–998...).

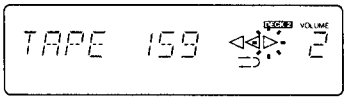
■ Program Search (TPS)

During playback, it is possible to skip to the track ahead or before the track which you are listening to and play back that track from the beginning.
(TPS: Tape Program Sensor)

Press one of the fast/tape program sensor buttons during tape play.

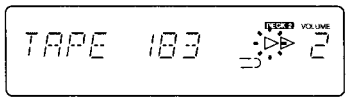
Finding the start of the program now heard

While the front side (▷) is being played, press the ◁◁ TPS button. (The tape is rewound to the start of the program now heard and the program is played back.)



Finding the start of the next program

While the front side (▷) is being played, press the TPS ▷▷ button. (Playback commences from the start of the next program.)



When the reverse side of the tape is being played back, the TPS function is operated in reverse.

Notes:
In the cases below the TPS may not function properly. This is to be expected and is not indicative of a breakdown.

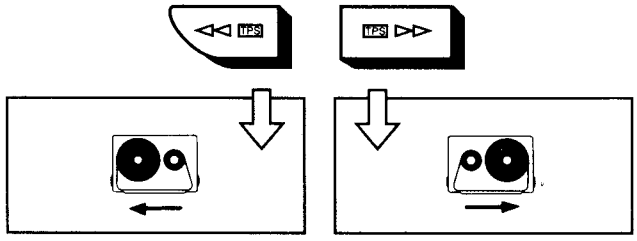
- When the unrecorded blanks between the tape programs are less the 4 seconds long.
- When a tape recorded from a microphone is being played back (and there are no unrecorded blanks between the tape programs).
- When the program has places where the sound has been recorded at a particulary low level or places where no sound has been recorded at all.
- When less than 10 seconds remain until the start of the present program or start of the next program.

■ Auto tape selector function

The auto tape selector function automatically selects the types of tape as soon as a tape is loaded, and sets the bias and equalization.

■ Fast forward and rewind

The tape will rapidly advance in the forward or reverse direction when one of the fast/tape program sensor buttons is pressed (during stop mode).



To fast forward or rewind the tape while another deck is used to playback, press the deck selector to switch the deck to be used and then press the fast/tape program sensor button.

■ Full auto-stop

During playback, recording, fast forward, or rewind when the tape reaches its end, the tape movement will automatically stop.
However, if the reverse mode is set to "⊂⊃" during playback, the auto-stop mechanism will not operate.

■ Dolby NR system

This is a system intended to reduce hiss noise in the high frequency range. It raises the level of the high frequency components during recording, and lowers it by the same amount during playback.

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.

"DOLBY" and the double-D symbol ⧈ are trademarks of Dolby Laboratories Licensing Corporation.

AUTO REVERSE SYSTEM (DECK)

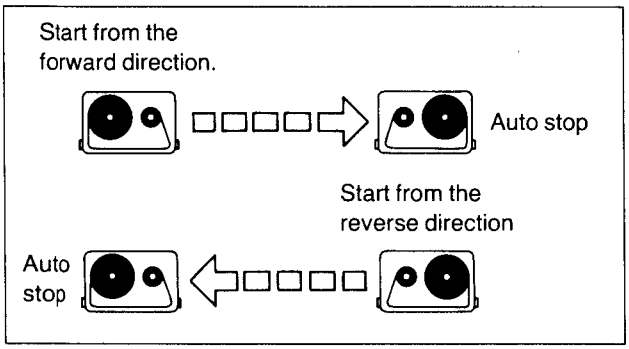
This unit is equipped with an auto reverse function that allows you to perform one-side playback/recording, two-side playback/recording or, repeat two-side playback.

- Tape direction can be reversed manually during playback by pressing the opposite direction of the playback button.

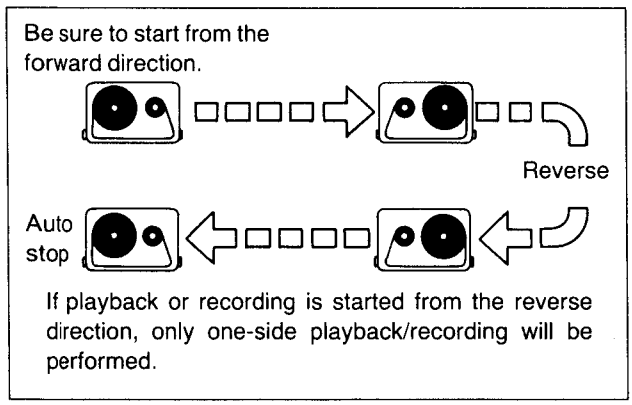
■ Reverse mode select button

The reverse mode select button can be used to select any of 3 type modes.

Non-reverse playback/recording mode (⇀)



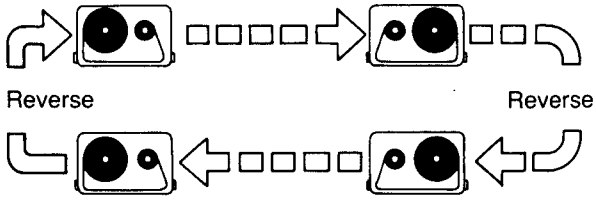
Auto-reverse playback/recording mode (⇄)



If playback or recording is started from the reverse direction, only one-side playback/recording will be performed.

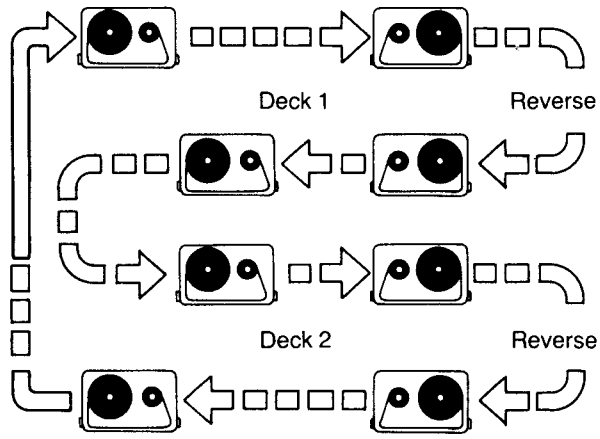
Auto-continuous playback mode (⇉)

When tape is loaded into only deck 1 or 2



Playback will be repeated until the stop button is pressed.

When tapes are loaded into both deck 1 and 2



The tapes are played back repeatedly in deck 1 and deck 2 until the stop button is pressed.

The auto-continuous playback mode can be operated in playback only. When recording, this mode will function the same as the auto-reverse mode.

Notes:

- You cannot record on a side of a tape of which erasure prevention tab has been broken. When performing two-side recording, be sure that the record prevention tabs for both sides of the tape are intact.
- When performing two-side recording, remember that if the cassette tape has a leader tape, recording will not be possible on that portion of the tape.
- The monitored sound will be temporarily interrupted during the operation of the auto-reverse function.

Your attention is drawn to the fact that recording pre-recorded tapes or discs on other published or broadcast material may infringe copyright laws.

■ Adjusting the recording level

This unit has an automatic level control that adjusts the recording level automatically when recording from the radio, the external microphone, the external unit or CD.
An automatic tape level setting (ATLS) system is also provided for setting the record level when recording from compact discs.

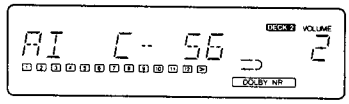
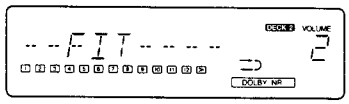
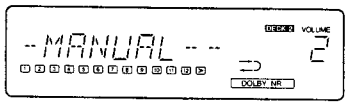
•ATLS (automatic tape level setting) system

Since compact discs generally have a wide dynamic range, careful setting of the record level is required to achieve the best recording results. ATLS system makes high quality recording from a disc as easy as automatic level control.

When the automatic tape level setting button is pressed in recording standby mode, this unit will automatically scan (fast search) the disc, set the appropriate recording level, and then start the recording.
When disc play is cancelled, the set level will be released.

■ CD edit recording functions

Use of the unit's CD edit recording functions safeguards against a break in the continuity of the sound when the recording changes from one side of the tape to the other.

Type of edit recording	Mode assigned	Features
Edit recording of all tracks on the CD in their original sequence (See page 28.)	**AI auto edit recording**	The length of the tape required to accommodate the recording of all the tracks on the CD in their original sequence is calculated and displayed in advance. The tracks are then recorded in their original sequence.  This display indicates that a tape longer than 56 minutes is needed.
Edit recording of all the tracks by rearranging the track sequence (See page 29.)	**Fit edit recording** 	When all the tracks on a CD cannot be recorded in their original sequence due to restrictions on the tape length, it is sometimes possible to record them all by rearranging their sequence. The built-in microcomputer calculates whether this is possible and it assigns the track sequence.
Edit recording of the desired tracks only (See page 30.)	**Manual edit recording** 	The tracks to be recorded can be assigned in the desired sequence while checking how much time is left over on the display.

Link edit recording

When edit recording of the first disc has finished, the tracks of another disc can be recorded.
It is convenient for recording several single compact discs on a tape using the edit-recording function.

■ To start edit recording

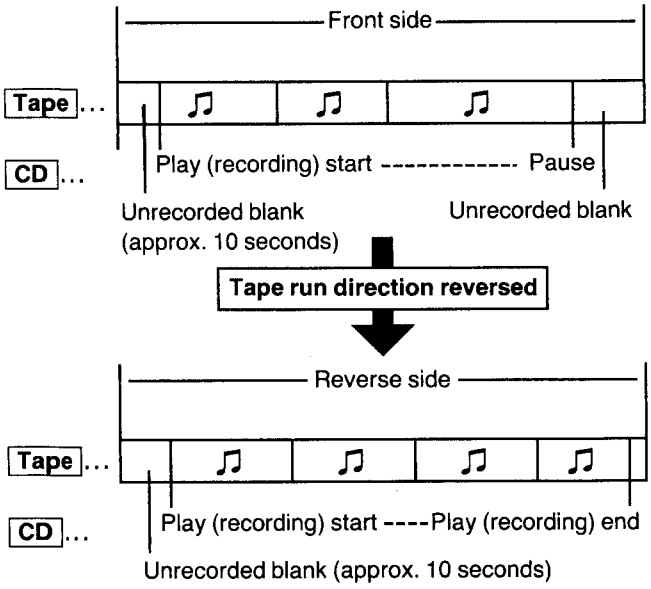
There are three modes to start edit recording as described below.

•AI EDIT recording

The cassette deck creates a non-recorded passage of about 10 seconds after rewinds the cassette tape. Then reset the tape counter, the cassette deck enters the recording stand-by mode.

The compact disc play section automatically scans for the peak (highest) level of the entire disc (ATLS), and then recording will start.

Sequence of operation



•ATLS recording

The compact disc player section automatically scans for the peak (highest) level of the entire disc (ATLS), and then recording will start.

The cassette deck doesn't rewind the leader tape, so take up the leader tape in advance.

•Automatic recording

The recording will start.

The cassette deck doesn't rewind the leader tape, so take up the leader tape in advance.

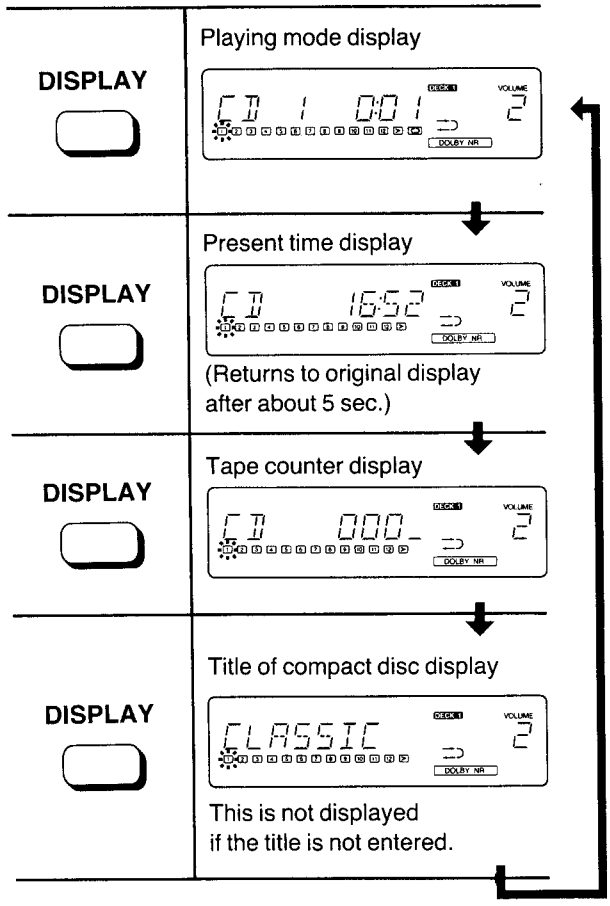
■ Selecting the display

(Using the remote control unit)

Every time the display button is pressed, the unit's display can be stepped through the playing mode displays, present time display, tape counter display and title display in sequence.

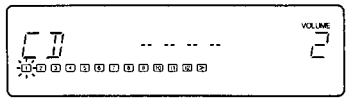
(This feature comes in handy during recording when making a note of the number on the tape counter or checking out the present time for recording a radio program.)

•When the CD mode/stop button is used



Note:

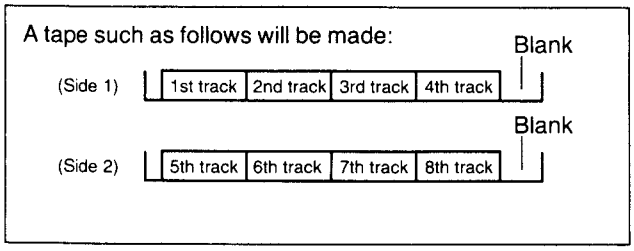
The tape counter display is as follows when tapes have not been loaded in either deck 1 or deck 2.



When you select the tuner source, the display 4 shows the name of broadcast station.

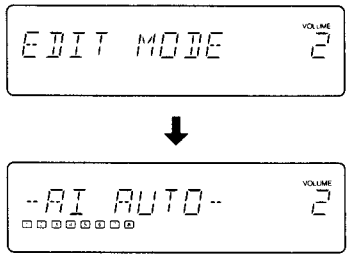
■ AI auto edit recording (deck 2 only)

(Recording all the CD tracks in sequence)

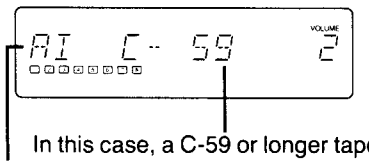


Before recording, check that the tape's erasure prevention tabs are intact and rewind the recording tape.

1. Press the CD mode/stop button and press the CD open/close button to insert the CD.
2. Press the compact disc edit button and turn the jog dial to select "AI AUTO".
   The "AI AUTO"–"MANUAL"–"FIT" displays will appear in sequence.

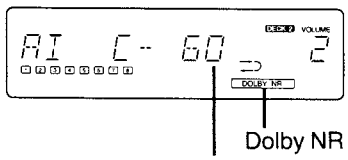


3. Press the SET button.
   The length of the tape required to record all the tracks appears on the display.



In this case, a C-59 or longer tape is required.
AI auto edit mode display

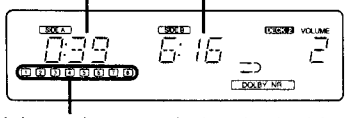
4. Turn the jog dial to specify the length of the tape, and insert the tape.



Dolby NR indicator
Since, in this case, a tape which is at least 59 minutes long is required, insert a C-60 tape.
When making a Dolby NR recording, press the Dolby NR button to illuminate the Dolby NR indicator.

5. Press the SET button.
   The tracks are assigned to both sides of the tape and the results are displayed.

Amount of time left over on tape side 1
Amount of time left over on tape side 2



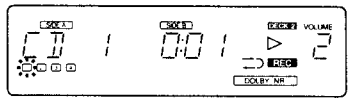
Tracks which can be recorded on both sides

When checking the tracks which have been assigned to both sides of the tape:

The following details can be checked each time the compact disc edit button is pressed.

① Number of tracks which can be recorded on tape side 1 (A) and amount of time left over on this side
② Number of tracks which can be recorded on tape side 2 (B) and amount of time left over on this side
③ Amount of time left over on tape sides 1 and 2

6. Press the automatic tape level setting button for AI EDIT recording. (See page 27.)



When you make the ATLS recording, press the rec-pause button and the automatic tape level setting button. (See page 27.)
When you make an automatic recording, press the rec-pause button and the play button in the CD section. (See page 27.)

After the unit specifies the tracks to be recorded, the CD edit/stereo indicator on the panel will illuminate.

•Number of CD tracks which can be edited

CD with up to 36 tracks can be used. (If the CD has 37 or more tracks, "ERROR" appears first and then the manual edit recording mode is automatically established. Program the tracks up to track 36 in the manual edit recording mode, and proceed with the recording.)

•To stop recording at any time

Press the CD mode/stop button.
The CD stops playing and the deck is set to the recording standby mode (CD synchro function).
Press the tape mode/stop button.
The CD and the deck stop playing.

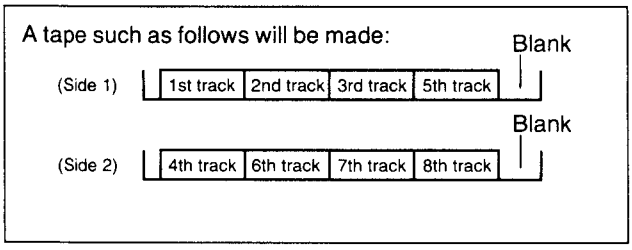
•To clear AI auto edit recording

Press the CD mode/stop button in the stop mode.
(The "CLEAR" display will appear.)
While recording, you can adjust the volume level and/or sound quality without affecting the record level.

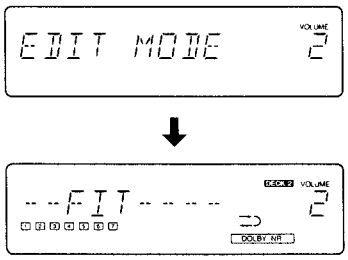
Note:
It is not possible to play a CD by simply using the CD edit recording function (since the ERROR display will appear).

■ Fit edit recording (deck 2 only)

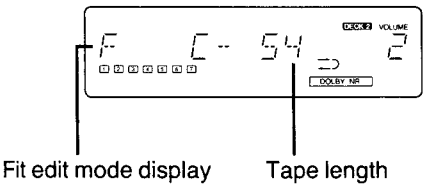
(Rearranging track sequence to fit CD recording on tape)
When all the tracks on a compact disc cannot be recorded in their original sequence due to restrictions on the tape length, it is sometimes possible to record them all by rearranging their sequence. The built-in microcomputer calculates whether this is possible and it specifies track sequence.
If there is enough recording time on the tape, the tracks will be recorded in their original sequence.



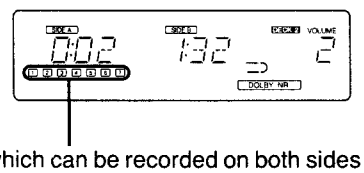
1. Press the deck 2 cassette eject button to load a tape in deck 2.
   Check that the tape's erasure prevention tabs are intact and rewind the recording tape.
   When making a Dolby NR recording, press the Dolby NR button to illuminate the Dolby NR indicator. Select the desired reverse mode.
2. Press the CD mode/stop button and press the CD open/close button to insert the CD.
3. Press the compact disc edit button and turn the jog dial to specify "FIT".
   The "AI AUTO"–"MANUAL"–"FIT" displays will appear in sequence.



4. Press the SET button and then turn the jog dial to select the length of the tape to be used.

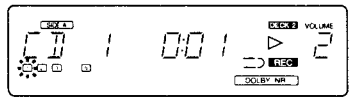


5. Press the SET button.
   The tracks are assigned to both sides of the tape and the results are displayed.



Press the compact disc edit button to confirm the tracks which have been specified to both sides of the tape.

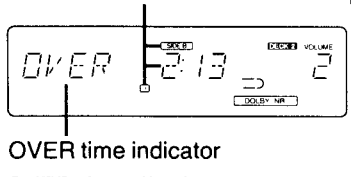
6. Press the automatic tape level setting button for AI EDIT recording. (See page 27.)



When you make the ATLS recording, press the rec-pause button and the automatic tape level setting button. (See page 27.)
When you make an automatic recording, press the rec-pause button and the play button in the CD section. (See page 27.)

When it is not possible to record all the tracks even by rearranging the track sequence, the OVER indicator appears.
Recording can still be started but the recording of track no. 9 will not be completed.

Track no. 9 cannot be recorded in its entirety: another 2 min. 13 sec. are needed on side 2 of the tape.



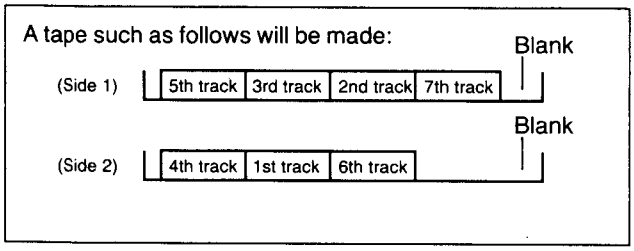
When the OVER time display is 1 to 15 seconds:
Since a tape is actually a little longer than its indicated length, it may still be possible to record all the tracks.

•To clear fit edit recording
Press the CD mode/stop button in the stop mode.
(The "CLEAR" display will appear.)

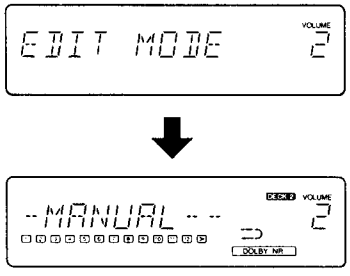
While recording, you can adjust the volume level and/or sound quality without affecting the record level.

■ Manual edit recording (deck 2 only)

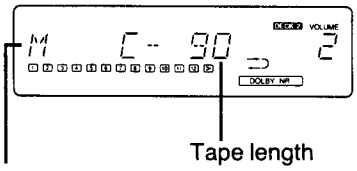
(Assigning the track and sequence to be recorded)
The tracks to be recorded can be specified in the desired sequence while checking how much time is left over on the display.



1. Follow the steps 1–2 on page 29.
2. Press the compact disc edit button and turn the jog dial to select "MANUAL".
   The "AI AUTO"–"MANUAL"–"FIT" displays will appear in sequence.

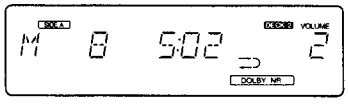


3. Press the SET button and then turn the jog dial to select the length of the tape to be used.
   You can specify the length by the minute.



4. Press the SET button.

5. Turn the jog dial to assign the tracks in sequence.
   Assign the tracks, then press the SET button to program up to 36 tracks.
   Also you can assign the tracks using the numeric buttons on the remote control unit.



   After about 1.5 seconds, the amount of time left over on side 1 will be displayed.

   If there is no more time left on tape side 1, tape side 2 is automatically selected.

   Press the cancel button if the wrong track has been programmed.
6. Press the automatic tape level setting button for AI EDIT recording. (See page 27.)
   Recording will start.

   When you make the ATLS recording, press the rec-pause button and the automatic tape level setting button. (See page 27.)
   When you make an automatic recording, press the rec-pause button and the play button in the CD section. (See page 27.)

•To clear the manual edit recording

Press the CD mode/stop button in the stop mode.
(The "CLEAR" display will appear.)

While recording, you can adjust the volume level and/or sound quality without affecting the record level.

■ Link edit recording

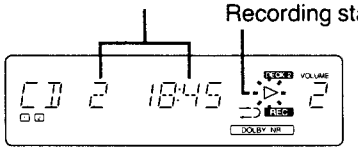
When edit recording of the first disc has finished, the tracks of another disc can be recorded.
It is convenient for recording several single compact discs on a tape using the edit recording function.

Never release the recording standby condition of the deck section by pressing the tape mode/stop button.
(The editing mode will be cancelled.)

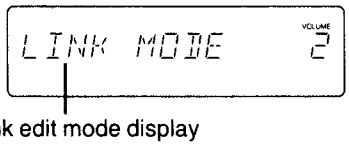
After recording of the first disc has finished

1. Press the CD open/close button to open the disc tray and then replace the disc.

   The number of tracks and total playing time of the second disc will be displayed.



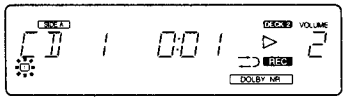
2. Press the compact disc edit button and then turn the jog dial to select the desired editing mode.
   It is only possible to select the editing mode as "AUTO" or "MANUAL".
   AUTO: Recording in order.
   MANUAL: Desired tracks and sequence.



   The link edit indicator will illuminate after exchanging the disc, and the CD edit/stereo indicator will appear after the unit specifies the tracks to be recorded.

3. Press the SET button.
   When auto edit recording is performed:
   The unit will specify the tracks and display the result.
   When manual edit recording is performed:
   Specify the track and sequence using the jog dial and SET button.

4. Press the automatic tape level setting button for ATLS recording or press the play button in the CD section for automatic recording.



•To cancel the link edit recording
Press the tape mode/stop button.

> **Note:**
> When the compact disc play during link edit recording is stopped, the link editing mode will be cancelled.

■ To record a compact disc without using the edit-recording function

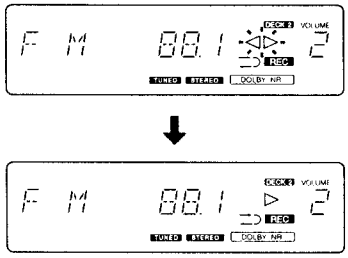
When the recording changes from one side of the tape to the other, the sound breaks on the leader tape part.

1. Insert a tape in deck 2.
2. Insert a compact disc.
   To record the desired tracks, program the tracks in advance. (See page 18.)
3. Select the reverse mode.
   You can select "⇄" or "⇉" mode. (See page 25.)
   When making a Dolby NR recording, press the Dolby NR button to illuminate the Dolby NR indicator.
4. Press the rec-pause button.
5. Press the ATLS button or play button in the compact disc section.
   •When you press the ATLS button
   After the unit searches for the peak level, the recording will start.
   •When you press the play button in the CD section
   The recording will start.

While recording, you can adjust the volume level and/or sound quality without affecting the record level.

■ Recording radio broadcasts

1. Follow the procedure described in "Tuning". (See page 21.)
2. Insert the cassette into deck 2.
   You cannot record on the leader tape, so take up the leader tape in advance.
   When making a Dolby NR recording, press the Dolby NR button to illuminate the Dolby NR indicator. Select the desired reverse mode.
3. Press the rec-pause button and the playback button to begin recording.



To briefly interrupt recording, press the rec-pause button.
To stop the recording, press the tape mode/stop button.

The "tailored" frequency responses, as set by the S-XBS system and preset equalizer mode, is not recorded onto the tape. This allows you to listen to the tape on different systems and in different environments, and still be able to tailor the playback frequency response of the tape.

•How to use the FM mode/beat proof button (on the remote control unit only)

When an LW/MW broadcast is recorded, the FM mode/beat proof button can be used to reduce unwanted "beat" signals (whistle) which are sometimes present. Press the button to whichever position (LW: BP 1, BP 2 or BP 3/MW: BP 1 or BP 2) best reduces these "beat" signals.

•While recording, you can adjust the volume level and/or sound quality without affecting the record level.

■ Erasure of recordings

When recording, previously recorded signals on the tape will be erased automatically.
To erase a tape without re-recording, use the following procedure. (Make no connections to the mixing microphone jack.)

1. Press the tape mode/stop button.
2. Press the rec-pause button, and playback button.

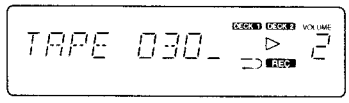
■ Monitoring

The monitor system enables you to listen, through the speakers or headphones, to the sound as it is being recorded. If it is necessary to adjust the volume level of the sound being monitored, do so by using the volume control. If an external microphone is placed too close to the speakers, feedback (noise) may be heard. If so, place the microphone as far away from the speakers as possible, or reduce the volume.

■ Synchronized editing (from deck 1 to deck 2)

1. Press the eject buttons and insert the playback tape into deck 1 and the editing tape into deck 2. You cannot record on the leader tape, so take up the leader tape in advance.
2. Press the tape mode/stop button.
   Tape mode indicator will appear on the display.
3. Select the desired reverse mode using the reverse mode select button.

4. Select the editing speed using one of the edit recording buttons.
   NORMAL: normal speed.
   HIGH: high speed.
   Editing is started by means of the synchro-start function.



Some TV sets generate noise that could be recorded during editing. To prevent the possibility of this, do not use this unit closer than 1.5 m to a TV set.

You can set the different types of tape in deck 1 and deck 2. The auto tape selector scans for the types of the tape to set the each bias and equalizer level. While recording, you can adjust the volume level and/or sound quality without affecting the record level.

Notes:

- •While synchronized editing is in progress, you cannot change the editing speed.
- •You can not make a synchronized recording with the Dolby noise reduction effect. The playback tape will be recorded to the new tape just as they were in the original recording.
  (During synchnized editing, the Dolby noise reduction system does not function.)

To stop the synchronized editing temporarily, press the rec-pause button.
To stop the synchronized editing, press the tape mode/stop button. (Both of deck 1 and deck 2 stop simultaneously.)
When deck 1 is stopped at the end of a tape side 2, deck 2 enters the recording standby condition.
When deck 2 is stopped at the end of a tape side 2, deck 1 also enters the stop condition.

•To record another tape on the remaining blank tape

Press the rec-pause button to stop the tape.
Replace the original (playback) tape, then press one of the edit recording buttons again to continue editing.

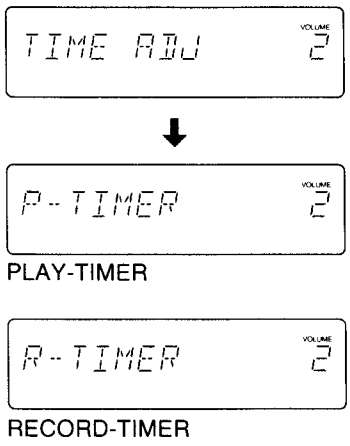
Do not press the tape mode/stop button to cancel the recording standby mode. (When you cancel the recording standby mode in the reverse direction, the recording direction will change to forward.)

■ Setting the time on the timer

Have you completed "TIME ADJUSTING" on page 16? Press operation switch to turn on the unit before operation.

The following example will show how to set the timer function for 7:15 to 8:15.

1. Press the timer clock button and then turn the jog dial to select the "P-TIMER" or "R-TIMER".
   The display will return to what was previously indicated if 10 or more seconds are allowed to elapse before the next operation is selected.



PLAY-TIMER

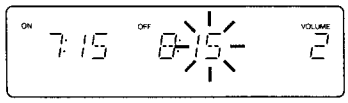
RECORD-TIMER

   Press the SET button.

2. Set the ON time.
   Turn the jog dial to select "7", and then press the SET button, and turn the jog dial to select "15".

   Press the SET button.

3. Set the OFF time.
   Turn the jog dial to select "8", and then press the SET button, and turn the jog dial to select "15".



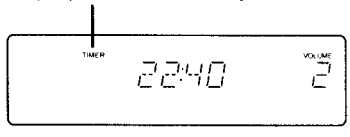
   Press the SET button.
   The display will change to the previous display.

■ Setting the timer play (P-TIMER)

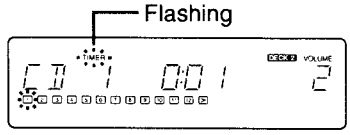
Have you completed "TIME ADJUSTING" on page 16? If not, please complete these sections before continuing.

1. Follow steps 1–3 on setting the time on the timer.
   (Select the "P-TIMER" in step 1.)
2. Select the sound source.
   CD
   Press the CD mode/stop button.
   You can enjoy the sequential play or program play by the timer. For program play, specify the desired tracks.
   Radio
   Press the tuner band button and select the desired band and tuned.
   Tape
   Press the tape mode/stop button.
   Both deck 1 and 2 can be operated by the timer. When cassette tapes are set in both deck 1 and 2, deck 1 has priority.
3. Set the volume level for timer play using the volume control.
4. Press the timer play button.
   The display shows the "ERROR" indication when you set only ON time or OFF time, or make the same time setting for ON time and OFF time.

   The timer play indicator will appear on the display.
   In each case, play will start at the preset time.



   At the preset time



- When use the P-TIMER with same time setting everyday, step 1 can be omitted.
- You can enjoy listening other sources after the timer setting has been done. After listening, turn off the unit to activate the timer mode. If not so, the timer will not function.
- When you wish to enjoy the desired source after the timer setting is completed, please use the sleep timer function. (See page 34.)

•To cancel the timer play
Press the timer play button again.
The timer play indicator will go out.

To stop the timer play, press the timer play button to cancel the timer mode, and then switch off the operation.

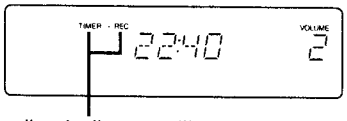
Note:
To play a compact disc using the timer, do not open the disc tray if tracks have already been programmed. (This will clear the programming and play will start from the first track.)

•To confirm the timer setting
Press the timer clock button in the standby mode.
The ON time and OFF time will be displayed in about 10 seconds.
The setting source will be displayed if the button is pressed again.

■ Setting the timer recording (R-TIMER)

Have you completed "TIME ADJUSTING" on page 16? If not, please complete these sections before continuing.

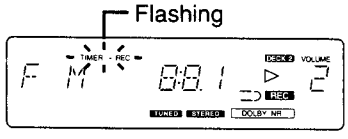
1. Follow the steps 1–3 on page 33 for setting the time.
   (Select the "R-TIMER" in step 1.)
2. Press the tuner band button and tune in the station whose broadcast is to be recorded, and then insert the tape into deck 2.
   The recording starts from the forward side.
   When you do not want to monitor the sound while recording, press the volume level to the minimum (– –).
3. Press the timer recording button.
   The timer recording indicator will appear.
   Timer recording will start at the preset time.
   The display shows the "ERROR" indication when you set only ON time or OFF time, or make the same time setting for ON time and OFF time.



Timer recording indicator will appear.

At present time

Flashing



To change the ON time and OFF time
Follow the steps 1–3 on page 33 for "Setting the time on the timer".

•To cancel the timer recording
Press the timer recording button.
The timer recording indicator will go out.

Upon completion of the recording, release the timer recording mode by pressing the timer recording button to avoid making an operational error.

Note:
It is not possible to set the timer recording and timer play simultaneously.
(For example, it is not possible to record with the timer a program in the middle of the night, and then wake-up by timer play the next morning.)

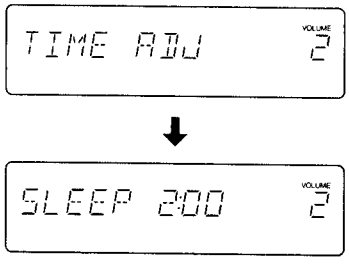
•To confirm the timer setting
Press the timer clock button in the standby mode.
The ON time and OFF time will be displayed in about 10 seconds.
The setting source will be displayed if the button is pressed again.

■ To use the sleep timer

This timer function can be used to turn off the unit at the desired time (1 minute to 120 minutes from the present time).

Use this timer to turn off the unit automatically even if you fall asleep while listening.

1. Press the timer clock button then turn the jog dial to select "SLEEP" while the sound source is being played.



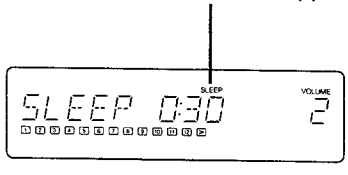
2. Press the SET button and then turn the jog dial to set the desired sleep time.
   FWD: 2:00–0:01–0:02–0:03...
   REV: 2:00–1:59–1:58–1:57...

3. Press the SET button.
   The display will return to the previous display.

   The sleep time set by the steps above is retained in memory. If you want to operate the unit on the same sleep time, only press the sleep timer button.

4. Press the sleep timer button.

The sleep timer indicator will appear.



•To change the remaining sleep time
Press the sleep button, the sleep time originally set will be displayed. Turn the jog dial to change the desired time (1 minute to 120 minutes).
When the sleep operation is performed again, the sleep time originally set will be displayed.
•To confirm the remaining sleep time
Press the sleep timer button.
•To cancel the sleep timer mode
Press the operation switch.

■ You can use the sleep timer in conjunction with the timer play or timer recording operation

For example, to go to sleep listening to the radio broadcasts, and to wake up the next morning listening to compact disc.

1. Set the ON time and OFF time for the timer play. (See page 33.)
2. Prepare for the play of a compact disc, and set the volume level for the timer play.
3. Press the timer play button.
   The unit will be switched to turn off.
4. Press the sleep timer button.
   This unit will be turned on, and the sleep timer indicator will appear.
   Set the desired time for sleep time.
5. Tune to your desired band and adjust the volume level.

For example, to go to sleep listening to compact disc, and then to make a timer recording from the radio broadcasts.

1. Set the ON time and OFF time for the timer recording. (See page 33.)
2. Select the desired band.
3. Insert a tape for recording in deck 2.
4. Press the timer recording button.
5. Press the sleep timer button, and set the time for the sleep timer.
   (Be sure to set the sleep time to be off before the timer recording starts.)
6. Play the compact disc and adjust the volume level.

When listen to a compact disc using both timer play and sleep timer function
You cannot make the different program setting for the timer play and sleep timer.
(After programmed the tracks, do not open the disc tray. The program mode is cancelled, and the timer play will start form the 1st track.)

For example, to go to sleep listening to a radio broadcast, and wake up the next morning listening to a compact disc, and afterwards to make a timer recording of a radio broadcast.

1) Set the ON time and OFF time for the timer play.
2) Set the ON time and OFF time for the timer recording.
3) Load a tape for recording in deck 2.
4) Prepare for the play for a compact disc, and set the volume level for the timer play.
5) Press the timer play button. (The unit will be switched off.)
6) Press the sleep timer button.
7) Select the desired broadcast station and adjust the volume level.

(Next morning)

8) Press the timer play button to cancel the timer play mode.
9) Select the desired station.
10) Press the timer recording button.

TO ENTER THE TITLES OF BROADCAST STATIONS AND DISCS

You can enter the names of the broadcast stations or titles of compact discs which is setting the unit and display them. (Maximum 8 characters: combined with A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, -, /, _)

Number of compact disc titles which can be entered: up to 20.
Number of station's name which can be entered: up to 30 stations (10 stations for each FM, LW and MW broadcasts).

1. Prepare for entering the title.
   When entering the title of compact discs:
   Press the CD mode/stop button, and then load a disc.

   When entering the names of broadcast stations:
   Before operation, perform the operations of "Memory presetting" on page 21. Press the tuning mode button to select "PRESET", and select the desired preset channel.
2. Press the title button and then press the SET button.
3. Turn the jog dial to select characters, and then press the SET button.
   Characters will be entered into memory one by one.
   FWD: Changing the characters in forward direction.
   REV: Changing the characters in reverse direction.
4. Repeat step 3 to enter the title or name for up to eight characters.
   When finishing to enter less than eight characters, press the SET button till the flashing bar comes to the eight position.

Notes:
- When a wrong character is entered, press the cancel button. The former character will flash to be reset.
- You can not enter the title with _ (space) only.

•To correct characters you entered
You can change characters with the above steps. When you wish to delete a character, select the _ (space) and press the SET button.

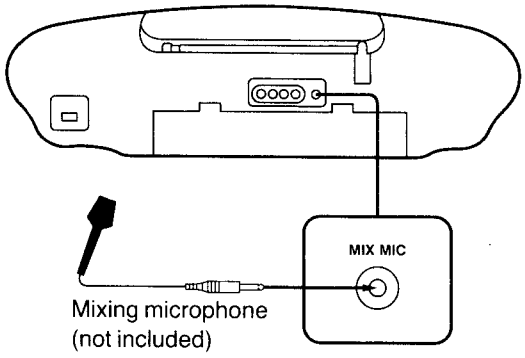
•When 20 titles of compact discs are entered in memory
If you try to enter another title of compact disc, the "FULL" indication is displayed, and then it changes to "SELECT".
Turn the jog dial to display the titles of 20 compact discs in sequence, and select the title to be replaced, and re-enter a title with the steps 3, 4 above.

To change the display
Press the title button.
The display will return to the previous condition.

MIC MIXING

Mixing is the combination of a voice or instrumental sound (through a microphone connected to the mixing microphone jack) and the sound from a CD, tape or radio.

■ Mixing microphone connection



■ Mixing playback

1. Connect the microphone to the mixing microphone jack.
2. Set the desired source to playback mode.

■ Mixing recording

•With cassette tape

1. Connect the microphone to the mixing microphone jack after reducing the volume level.
2. Insert a tape for playback in deck 1, and a tape for recording in deck 2.
3. Press the tape mode/stop button.
4. Select the desired reverse mode.
5. Press the "NORMAL" button.
   The playback and recording will start.

•With other source

1. Connect the microphone to the mixing microphone jack after reducing the volume level.
2. Insert a tape for recording in deck 2.
3. Press the rec-pause button and select the desired reverse mode.
   The cassette deck enters the recording standby mode.
4. Set the desired source to playback mode.
5. Press one of the playback buttons in the cassette deck section.
   The recording will start.

•Recording through mixing microphone

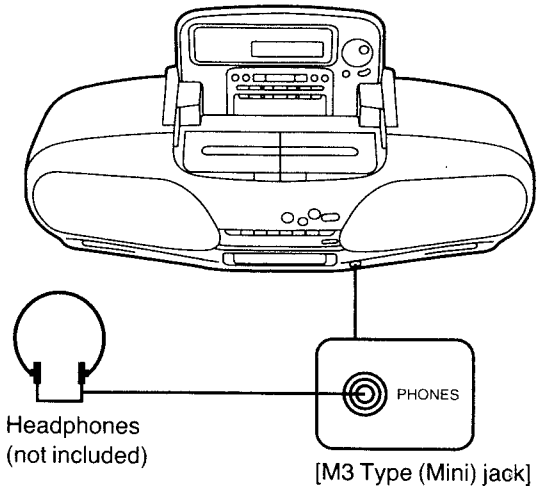
1. Connect the microphone to the mixing microphone jack after reducing the volume level.
2. Insert a tape for recording in deck 2.
3. Press the tape mode/stop button.
4. Select the desired reverse mode.
5. Press the rec-pause button.
   The cassette deck enters the recording standby mode.
6. Press one of the playback buttons in the cassette deck section.
   The recording will start.

Notes:

- When not using a microphone, disconnect it from the microphone jack.
- While using the microphone, howling or squaling may sometimes occur. When it occurs, separate the microphone from the speaker, or decrease the volume level.
- When the compact disc play stops or pauses while enjoying the microphone mixing, the voice from the speaker also stops.

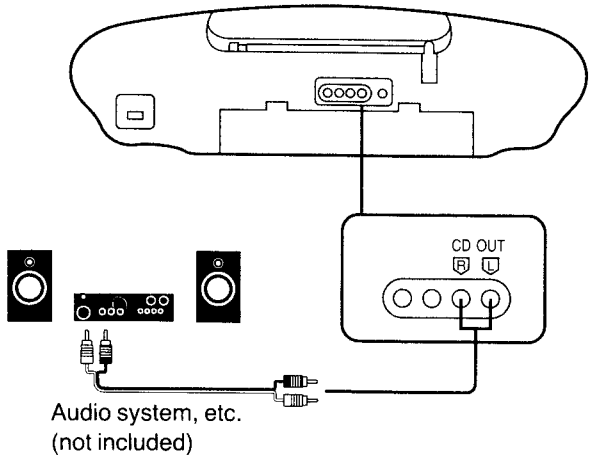
CONNECTIONS

■ Headphones connections



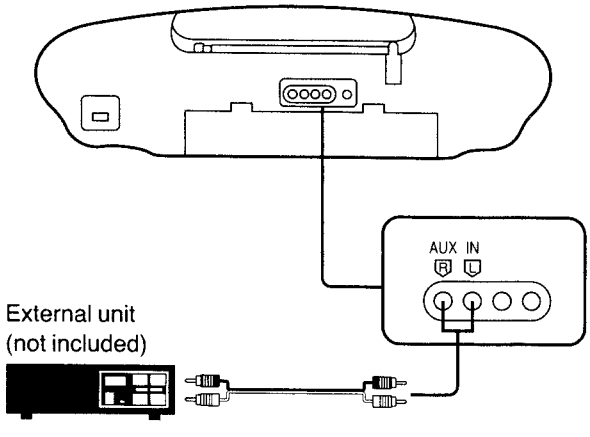
- Avoid listening for prolonged periods of time to prevent hearing damage.
- Speakers are automatically cut off when the headphones are connected.

■ Listening through the audio system (CD only)



■ External unit connections

Connect an external unit, such as a VCR or TV (not included) with output terminals.
Press the Aux button when using an external unit.



■ Operations

The following operations can be performed using the remote control unit.
They are identical to the operations performed using the main unit controls.

•Operation Switch
Operation OFF when the unit is powered by dry batteries.
Operation ON/OFF when the unit is powered by an AC main supply.

•CD operation
Selection of CD mode, sequential play, program play, direct access play, random play, repeat play, skip play, search play, program clear, pause, stop, disc tray open/close.

•Radio operations
Selection of tuner mode, band switching, preset tuning, FM mode selection/beat proof.

•Tape operation
Selection of tape mode, forward-side playback, reverse-side playback, stop, fast forward, rewind, TPS, recording pause, recording, selection of deck.

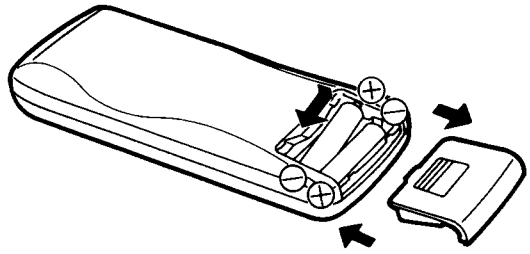
•Others
Sleep ON/OFF, display selection, top panel open/close, changing the tone quality, surround functions.

•Volume control
Volume up/down.

When operating the unit using the remote control unit press the buttons on the remote controller slowly and accurately.

■ Inserting the remote control unit batteries

1. Open the cover of the battery case.
2. Insert the batteries.
   Batteries used: Two R03/LR03 (Panasonic UM-4 or equivalent, not included).



Insert the batteries in the correct polarity (⊕, ⊖).

■ Replacement interval of remote control unit batteries

Although the life of the batteries will vary depending upon the number of times that the remote control unit is used, the average life based on the used of the batteries is about 1 year.

If the remote control unit fails to operate when it is held near the unit, replace the batteries with new batteries, even if one year has not elapsed.

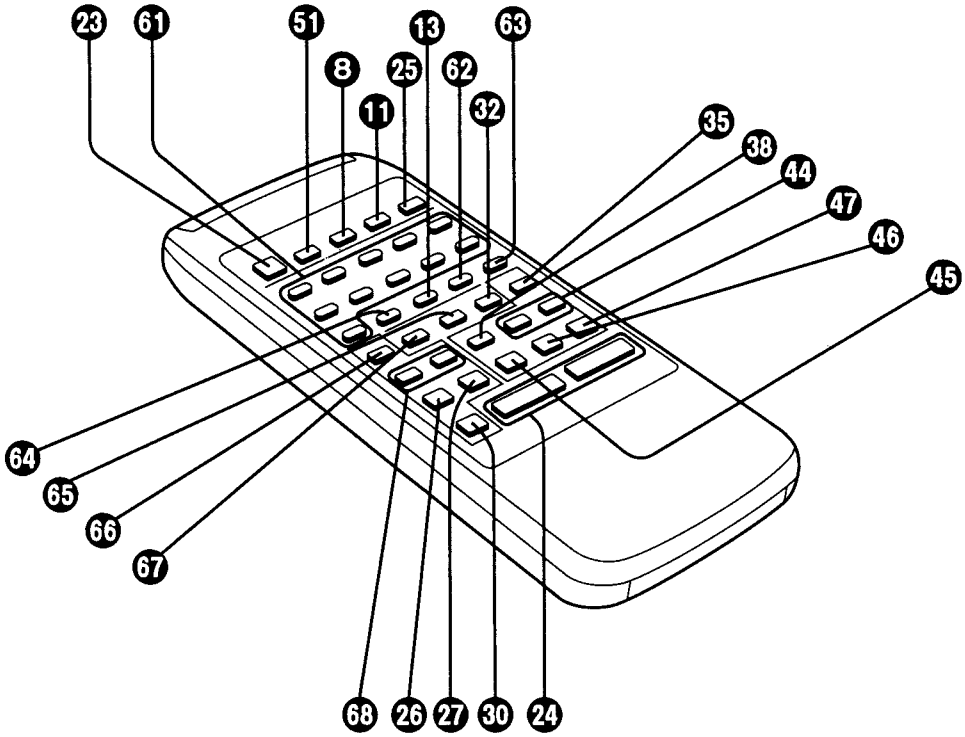
Precautions for using the remote control unit

- If the unit is exposed to direct sunlight, the remote control unit may sometimes fail to function. Be sure, therefore, to keep the unit out of direct sunlight. In such case, the maximum range of the remote control unit (approx. 7 m) may sometimes be reduced.
- If strong light falls on the remote control sensor of the unit (e.g. high frequency type fluorescent lamp), the signals from the remote control unit may fail to be received by the unit. In such a case, take steps to prevent strong light from falling onto the unit.
- If there is an obstacle between the remote control unit and the unit, the signals from the remote control unit will be blocked off, preventing the unit from operating.
  Use the remote control unit in a position directly in front of the unit so that the remote control sensor can be seen.
- Even if the remote control unit is not aimed at the unit, the unit may sometimes operate when a button on the remote control unit is pressed. This is caused by the infra-red beam being reflected off a wall, ceiling, floor, or furniture, and striking the remote control unit of the unit.

- Do not operate the remote control unit of this unit near a unit which is designed to operate using a different remote control unit.
- Do not simultaneously use this remote control unit and one or more remote control units intended either for the same type of unit or for another type of unit, such as a television set.
- If you operate the remote control unit near the unit when listening to an MW or LW broadcast, noise may be heard. In such a case, hold the remote control unit at a sufficient distance from the unit so that noise is not heard.
- Do not disassemble the remote control unit or touch any of the components inside it.
  Do not place a heavy object on the remote control unit or leave it exposed to direct sunlight or in a hot location.
- Do not spill liquids on the remote control unit. This may cause damage to the remote control unit.

- The receiving angle is approx. 60° (30° in each of the left, right, up, and down directions).
- The maximum usable distance in about 7 m when the remote control unit is aimed directly at the remote control sensor.

■ Controls and functions



61 Numeric buttons (1–10/0, +10)
These buttons are used to specify the CD's track (1–10, +10), and select the preset memory channel of the tuner (1–10).

62 Random button (RANDOM)
Press this button to let the microcomputer make a random selection of the sequence.

63 Repeat button (REPEAT)
Press this button to activate the repeat mode. The repeat indicator will appear.

64 Program button (PROGRAM)
Press this button for CD program-play and for preset memory of the tuner.

65 FM mode/beat proof button (FM MODE/B.P)
The functions of this button change according to the selected radio band.
MW/LW: Beat proof (for recording from the MW/LW radio)
FM: MONO/STEREO

66 Pause button (❚❚)
Press this button to stop the disc temporarily.

67 Display button (DISPLAY)
Press this button when you wish to confirm the present time while listening to CD, radio and tape.

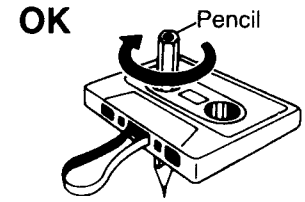
68 Skip/search buttons (⏮/◄◄, ►►/⏭)
Press one of these buttons to skip (backward or forward) the tracks, or to search (backward or forward) the desired portion of the disc.

Note:
Please refer to "LOCATION OF CONTROLS" for the controls not described above.

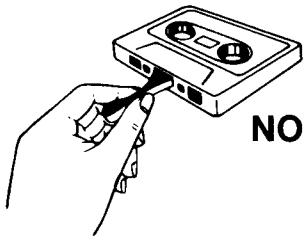
CASSETTE TAPES

Use only good quality type tapes up to the length of C-90.
Do not use C-120 tapes with this unit because these tapes can easily become broken or stretched if not used with extreme care and may get tangled with the capstans and pressure rollers.

If the tape loosens, take up the slack by turning the reel in the proper directions.



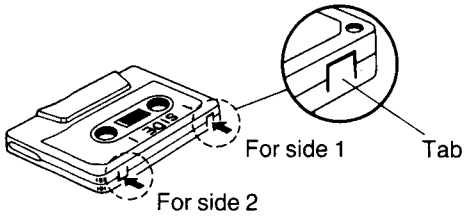
Do not handle, or pull the tape out of the cassette.

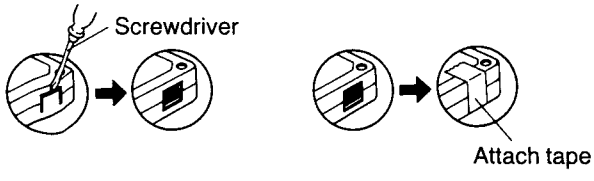


Notes:
- When recording, use normal or chromium type of cassette tapes only. If metal tape is used, you may not obtain optimum performance.
- Cassettes, both recorded and unrecorded, should not be stored in locations with high temperature, high humidity or direct sunlight. Never place a recorded cassette near a magnetic source, such as a magnet or a TV set as this may affect tape performance.

RECORD PREVENTION TABS

Cassettes are provided with plastic tabs (as illustrated) to prevent accidental erasing of a recording.
Recordings can be made only when the tab is intact. There is one tab for each side (track) of the tape. To preserve a valuable recording, the tab(s) should be broken off with a small screwdriver.
If you want to record on a track whose tab has already been broken off, use attach tape to cover the hole, and record.





CONCERNING COMPACT DISCS

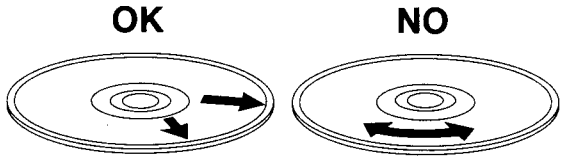
Observe the following precautions to enjoy the same outstanding performance from your compact discs for many years.

■ Handling precautions

Only compact discs having this mark can be used with this player.

COMPACT disc DIGITAL AUDIO

- Hold compact discs by the edges so the surface is not soiled with fingerprints.
- Be careful not to scratch the surface with fingernails or other sharp objects, particularly when inserting and removing discs from their cases.
- Do not bend the disc.
- Do not use record cleaning sprays or static electricity prevention liquids.
- Do not wipe with benzine, thinner or any other solvent. If the surface is soiled, wipe gently with a soft, damp (water only) cloth.
- When wiping discs, always move the cloth directly outward form the center of the disc, not in a circular motion as with standard phonograph records.



(In compact discs, circular scratches along a ling of pits are more likely to cause errors than straight scratches across many lines of pits.)

- If the disc is brought from a cold environment into a warm room, dew may form on the disc. Wipe this off with a soft, dry cloth before using the disc.
- Do not try to dry discs with a hair dryer.
- Do not write on the label side with a ball-point pen, hard pencil or other writing utensil.

■ Storage precautions

- Be sure to store discs in their cases to protect them from dust, scratches and warping.
- Do not place or store discs in the following places:
  1. Locations exposed to direct sunlight.
  2. Locations with high humidity or a lot of dust.
  3. Locations directly exposed to a heat outlet or heating appliance.
  4. In the glove compartment or rear ledge of an automobile.

ABOUT DEW

Dew is often seen as water built-up on the inside of the windows in a warm room on a cold winter day. Dew can also form inside this unit in a similar manner in the following cases:

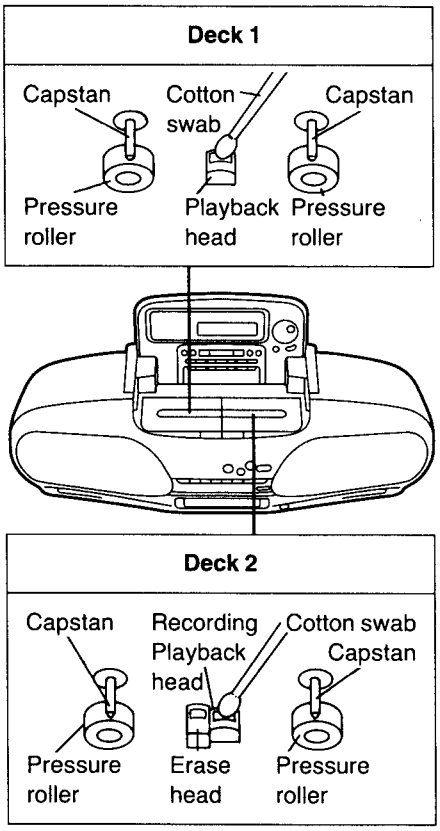
- Immediately after a heater has been turned on.
- In a steamy or very humid room.
- When the unit is suddenly moved from a cold environment to a warm place.

If dew forms inside this unit, it may not operate properly. To correct this problem, turn on the operation and wait about 1 hour for the dew to go away.

■ Cleaning of Tape Heads

The head assembly, capstans, and pressure rollers are in constant contact with the tape. If these parts are dirty, the sound quality will be impaired. Get into the habit of cleaning the parts regularly (after every 10 hours or so of use) in accordance with the procedure outlined below.

1. Open the cassette compartment covers by pressing the cassette eject buttons.
2. Clean them with a cotton swab.



Notes:

- If the heads are extremely dirty, clean them with a cotton swab dampened with a little alcohol.
- Do not bring any type of metal objects or tools such as magnetic screwdrivers in contact with the head assembly.
- Do not clean the plastic cabinet with benzine or thinner. Clean it with a solution of soap and water.
- Avoid spray-type insecticides. Some insecticides contain chemicals that could cause cabinet deformation.

Memo

SPECIFICATIONS

■ Radio

Frequency Range:	FM; 87.5–108 MHz LW; 144–288 kHz MW; 522–1611 kHz

■ Disc Player

Sampling Frequency:	44.1 kHz
Decoding:	16-bit linear
Beam Source:	Semiconductor laser (wavelength 780 nm)
No. of Channels:	2 channel, stereo
Frequency Response:	20 Hz–20 kHz (+1, −2 dB)
Wow and Flutter:	Unmeasurable
D/A converter:	MASH (1 BIT)

■ Tape Recorder

Track System:	4 track, 2 channel, stereo
Recording System:	AC bias
Erasing System:	AC erase
Monitor System:	Variable sound monitor
Frequency Range:	
Normal;	30–16000 Hz
CrO_2;	30–17000 Hz
Metal;	30–18000 Hz

■ General

Power Requirement:	AC; 230–240 V, 50 Hz Power consumption; 57 W Battery; 15 V (10 R20/LR20, UM-1 batteries) Memory Back-up for Computer/ Clock; 6 V (4 R6/LR6, UM-3 batteries)
Power Output:	70 W...PMPO
Speakers:	2 Woofers; 10 cm 2 Squawker Tweeter; 8 cm
Jacks:	
Input;	MIC; 2.5 mV (200–600Ω) AUX; 200 mV (47 kΩ)
Output;	HEADPHONES; 32Ω CD OUT; 1 V (CD 0 dB)
Dimensions (W×H×D):	710×205 (322*)×263 mm *When the top panel open
Weight:	8.0 kg without batteries

Note:
Specifications are subject to change without notice.
Weight and dimensions are approximate.

This apparatus was produced to BS 800.

MASH is a trademark of NTT.

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